DOCUMENT RESUME

ED 052 548 80 EA 003 673

AUTHOR	Johns, Roe L., Ed.; And Others
TITLE	Status and Impact of Educational Finance Programs. National Educational Finance Project, Volume 4.
INSTITUTION	National Educational Finance Project, Gainsville, Fla.
SPONS AGENCY	Office of Education (DHEW), Washington, D.C.
PUB DATE	71
NOTE	342p.
EDRS PRICE	EDRS Price MF-$0.65 HC-$13.16
DESCRIPTORS	*Educational Economics, *Educational Finance, *Equalization Aid, Federal Aid, Federal Legislation, Financial Policy, *Financial Support, Fiscal Capacity, Income, School Demography, State Aid, *State Federal Support
IDENTIFIERS	Elementary Secondary Education Act Title V, ESEA Title V

ABSTRACT

Ten articles on various aspects of educational finance programs comprise this document, volume four of the NEFP series. Volume one of this series deals with educational needs, volume two with economic factors in educational finance, and volume three with educational planning and finance. The material in this volume provides valuable information on the status of educational financing and the impact of both State and Federal school finance programs on the equalization of educational opportunity. The first six chapters focus on methods, purposes, and equalization of State school finance programs in all 50 States and the last four chapters describe and assess the equalization impact of Federal aid programs on elementary and secondary education. Related documents are ED 036 007 and EA 003 536-538. Funds for this research were provided by an ESEA Title V grant. (Author/RA)

NEFP

Status and Impact of Educational Finance Programs

Edited
by
Johns-Alexander-Stollar

ED052548

EA003 673

NATIONAL EDUCATIONAL
FINANCE PROJECT

Volume 4

1

ED052548

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

Status and Impact of Educational Finance Programs

Edited By

ROE L. JOHNS, Project Director and
Professor
Educational Administration
University of Florida

KERN ALEXANDER, Associate Project
Director and Professor
Educational Administration
University of Florida

DEWEY H. STOLLAR, Professor and
Chairman
Department of Educational
Administration
University of Tennessee

1971

NATIONAL EDUCATIONAL FINANCE PROJECT

Gainesville, Florida 32601

NATIONAL EDUCATIONAL FINANCE PROJECT

Roe L. Johns, Project Director
Kern Alexander, Associate Director

PROJECT RESEARCH STAFF

Richard Rossmiller
University of Wisconsin

K. Forbis Jordan
Indiana University

Gerald Boardman
University of Florida

William Briley
University of Florida

Dewey Stollar
University of Tennessee

Richard Salmon
University of Florida

Oscar Hamilton
University of Florida

Program Administrators

U. S. Office of Education
Harry Phillips
James Gibbs
David Phillips

PROJECT COMMITTEE

Edgar Morphet
University of California

William McLure
University of Illinois

Erick Lindman
U.C.L.A.

James Kelly
Columbia University

ADVISORY COMMITTEE

James Gibbs
U.S. Office of Education

Henry Cone
Education Commission of the States

Jean Flanigan
National Education Association

Will Myers
Advisory Commission on Intergovernmental Relations

COORDINATING COMMITTEE

Floyd T. Christian, Florida
John W. Porter, Michigan
Howard Casmey, Minnesota
Newell J. Paire, New Hampshire
Ewald Nyquist, New York
Dale Parnell, Oregon
J. H. Warf, Tennessee
J. W. Edgar, Texas

Walter D. Talbot, Utah
Herman O. Myers, Florida
Thomas P. Wilbur, Michigan
S. Walter Harvey, Minnesota
Paul R. Fillion, New Hampshire
John W. Polley, New York
Delos D. Williams, Oregon
T. B. Webb, Tennessee
M. L. Brockette, Texas

Financed by Funds Provided Under The Elementary and Secondary Education Act of 1965 (Public Law 89-10, Title V, Sec. 505) and Sponsoring States.

TABLE OF CONTENTS

Page

FOREWORD ix

CHAPTER 1

THE DEVELOPMENT OF STATE SUPPORT FOR THE PUBLIC SCHOOLS
Roe L. Johns 1

CHAPTER 2

CLASSIFICATION OF STATE SCHOOL FUNDS
Kern Alexander, Oscar Hamilton, and Douglas Forth 29

CHAPTER 3

VARIATION BETWEEN SCHOOL DISTRICT REVENUE AND FINANCIAL ABILITY
William P. Briley 49

CHAPTER 4

THE FINANCIAL EQUALIZATION OF PUBLIC SCHOOLS SUPPORT PROGRAMS IN THE UNITED STATES FOR THE SCHOOL YEAR, 1968-69
Roe L. Johns and Richard G. Salmon 119

CHAPTER 5

COMPARISON OF REVENUES FOR DIFFERENT POPULATION CLASSIFICATIONS OF SCHOOL DISTRICTS
Roe L. Johns and James A. Burns 193

CHAPTER 6

LOCAL NONPROPERTY TAXES FOR SCHOOLS
Duane O. Moore 209

CHAPTER 7

HISTORICAL DEVELOPMENT OF FEDERAL AID PROGRAMS
Sidney Tiedt 223

CHAPTER 8

FINANCIAL EQUALIZATION AMONG THE STATES FROM FEDERAL AID PROGRAMS
Edgar H. Bedenbaugh and Kern Alexander 251

CHAPTER 9

THE RELATIONSHIP BETWEEN REVENUE ALLOCATIONS AND EDUCATIONAL NEED AS REFLECTED BY ACHIEVEMENT TEST SCORES[1]
Donald S. Van Fleet and Gerald Boardman 293

CHAPTER 10

INTENT AND EFFECT OF TITLE I ESEA IN THE FINANCIAL EQUALIZATION OF PUBLIC ELEMENTARY AND SECONDARY EDUCATION
John F. Wagner and Dewey Stollar 319

CONTRIBUTORS

KERN ALEXANDER
Professor of Educational Administration, University of Florida, and Associate Director of National Educational Finance Project

EDGAR H. BEDENBAUGH
Research Associate, National Educational Finance Project and Associate Professor of Educational Administration, University of Southern Mississippi

GERALD BOARDMAN
Assistant Professor of Educational Administration, University of Florida and Systems Analyst, National Educational Finance Project

WILLIAM P. BRILEY
Interim Assistant Professor of Educational Administration, University of Florida

JAMES A. BURNS
Research Associate, National Educational Finance Project and member of Administrative Staff of Davidson County, Tennessee Schools

DOUGLAS FORTH
Research Associate, National Educational Finance Project

OSCAR A. HAMILTON
Interim Assistant Professor of Educational Administration, University of Florida

ROE L. JOHNS
Professor of Educational Administration, University of Florida, and Project Director of National Educational Finance Project

DUANE O. MOORE
Research Associate, National Educational Finance Project and Assistant Superintendent of Schools, Chapel Hill, North Carolina

DEWEY STOLLAR
Professor of Educational Administration, University of Tennessee and Finance Specialist, National Educational Finance Project

SIDNEY TIEDT
Professor of Education, San Jose State College

DONALD S. VAN FLEET
Research Associate, National Educational Finance Project and Principal of Seminole High School, Pinellas County, Florida

JOHN F. WAGNER
Research Associate, National Educational Finance Project and Assistant Professor of Education, Middle Tennessee State University

Foreword

This is the fourth volume published by the National Educational Finance Project which began operating in June 1968. Following is a list of the volumes already published or in press by June 1, 1971.

Volume 1	Dimensions of Educational Need
Volume 2	Economic Factors Affecting the Financing of Education
Volume 3	Planning to Finance Education
Volume 4	Status and Impact of Educational Finance Programs
Volume 5	Alternative Programs for the Financing of Education

Volume 4 presents some very valuable information on the status of educational financing in the United States in 1968-69 and the impact of both state and federal school finance programs on the equalization of educational opportunity. The information produced for 1968-69 should provide a valuable bench mark from which progress in school financing in subsequent years can be measured. Furthermore, this volume provides many valuable suggestions for improving the equity of both state and federal school finance programs. These suggestions are based on empirical research as contrasted with opinion.

The research findings reported in Volume 4 should be of great value to congressmen, state legislators, state and local school board members and educational leaders in evaluating present school finance policies and formulating plans for their improvement. The attempt was made to report the findings of these researchers in such form that they could be read and interpreted by persons unfamiliar with statistical technology. When statistical techniques are used to interpret data, an explanation of those techniques is given.

One of the tasks of the National Educational Finance Project was to determine the status and assess the impact of current state and federal school finance programs. This volume is directed toward that goal. The studies reported here are intended to establish a bench mark in school finance for the year 1968-69.

The first six chapters of the book focus on methods, purposes and equalization of state school finance programs in all fifty states while the last four chapters are devoted primarily to describing and assessing the equalization impact of federal aid programs on elementary and secondary education. All state school finance programs, including small categorical grants, are classified, measured as to the extent of their equalization, and profiled to show the impact of local, state, and federal revenues on school districts with varying levels of fiscal ability. Included is a chapter comparing revenues available to urban, suburban, independent cities, and rural areas from local, state and federal sources. Another chapter analyzes the equalization qualities of local nonproperty taxes when used as a major revenue source for financing the schools.

Studies dealing with the federal aid programs were largely concerned with the extent of the equalization effect of federal programs both among and within states. One chapter compares allocations of ten major federal aid programs to the personal income of states as *a* measure of equalization. Studies reported in other chapters measured equalization of federal programs among school districts and counties within states in terms of both pupil achievement test scores and personal income.

The research reported in this volume involved the collection of enormous amounts of data from all 50 states. We wish to give special thanks to the 50 chief state school officers and their assistants for their cooperation and the great amount of time they contributed to assembling the data required for the Project. Acknowledgment should also be made of the invaluable services of the United States Office of Education not only for sponsoring and financing this project but also for furnishing much valuable data to our research staff. Finally, special recognition should be given to Dewey Stollar for his services in assisting in the supervision of much of the reported research and to Gerald Boardman for his valuable assistance in statistical and computer applications so important to the success of this Project.

ROE L. JOHNS
KERN ALEXANDER

CHAPTER 1

The Development of State Support for the Public Schools

ROE L. JOHNS

State support for the public schools has a long history. It probably began in the early part of the nineteenth century. Unfortunately, authentic financial reports are not available from which the evolution of state support during the nineteenth century may be traced. However, by 1890 the states collectively provided $33,987,581 in financial aid for the public schools.[1] This amounted to 23.8 percent of total school revenue in 1890.[2] Undoubtedly, much of the state aid reported was derived from income from sixteenth section land grants from the federal government which could be strictly interpreted as federal aid rather than state aid. In fact, Mort, in the study from which these data are quoted, referred to the revenue as "state and federal" revenue although the federal government did not make any direct appropriations for the public schools until the Smith-Hughes Bill was enacted into law in 1917.

The sixteenth section land grants, provided in the Ordinance of 1787 and the action of Congress in 1802, continuing the policy of making land grants for public education in all states newly admitted to the Union, undoubtedly stimulated state support. State agencies handled these land grants and distributed funds derived from the land grants. This set a precedent of providing funds for the public schools from the state level. Some of these land grants proved to be valuable and productive of income, and others worthless. The demand was made in some states during the nineteenth century that the state provide funds for the schools in the townships which had happened to receive worthless land grants. This was probably the beginning of the concept of financial equalization for the purpose of equalizing educational opportunity.

Although it was generally conceded that education was a state responsibility under the Tenth Amendment to the federal Constitution, most states during the nineteenth century exercised that responsibility, primarily by authorizing the levy of local school taxes for the support of the public schools. No integrated plans of school finance were developed during the nineteenth century. No conceptual theory of school finance was developed. Such state funds, as were distributed, were generally apportioned on a school census basis with little consideration being given to equalization of educational opportunity or the provision of at least a minimum program of education for all children. In the remainder of this chapter, primary attention will be given to the development of conceptual theories of state support, the development of state support since 1930 and the principal issues of state support.[3]

THE DEVELOPMENT OF THEORIES AND PRINCIPLES OF STATE SUPPORT[4]

All important social movements have had an intellectual leader or leaders. These men, who are almost always theorists, are sometimes considered impractical by the general public. However, it is the theorists who shape social policy and social organization more than any other group in society. Politicians and public officials usually base their policies on theoretical assumptions of some kind. Politicians such as Jefferson, Hamilton, and Madison, who were also theorists, have had a profound effect on governmental policy in the United States.

The early theorists on state school finance were not politicians or holders of public office. All of them were university professors, but they have had a profound influence on political policy in the United States with respect to state school financing. These theorists dealt with some of the crucial values, issues, and problems in American society. Therefore, what they had to say was of great interest to the public. Some of the values and issues involved in determining policies on state school financing follow: Is equalization of educational opportunity a function of a democratic government? What level of education should be guaranteed to everyone in order to promote the general welfare? To what extent should the states exercise control over the public schools? To what extent should "home rule" in school government be encouraged? Are nonproperty state taxes more equitable than local property taxes? What percent of school revenue should be provided from state sources?

The central stream of state school finance theory in the United States originated at Teachers College, Columbia University, at the beginning of the twentieth century. The chief participants in this stream and their principal concepts are discussed in the following sections.

Ellwood P. Cubberley

The development of the theory of state school support began with Cubberley, who was a student at Teachers College, Columbia University, near the beginning of the twentieth century. His famous monograph on *School Funds and Their Apportionment,*[5] a revision of his doctoral dissertation, was published in 1905. It is interesting to note that George D. Strayer, Sr., who is discussed later, also received his doctor's degree at Teachers College in 1905. These two were among the first professors of educational administration. Strayer stayed at Teachers College, and Cubberley went to Stanford University. These two giants were largely responsible for developing the early literature of educational administration. The conceptualizations of school finance developed by these two men, their students, and students of their students have dominated the thinking on educational finance during the twentieth century.

Cubberley's work was so fundamental in formulating the basic concepts of state school financing that several quotations from his original study published in 1905 are set forth below. He studied the historical development of education in the United States, the legal arrangements provided for public education, the effect of the Industrial Revolution on the distribution of wealth, and the inequalities of educational opportunity among the several districts of a state. He then formulated his concept of the state's responsibility for providing educational services as follows:

> The state owes it to itself and to its children, not only to permit of the establishment of schools, but also to require them to be established—even more, to require that these schools, when established, shall be taught by a qualified teacher for a certain minimum period of time each year, and taught under conditions and according to requirements which the state has, from time to time, seen fit to impose. While leaving the way open for all to go beyond these requirements the state must see that none fall below.[6]

He applied his basic concept of state responsibility to the apportionment of state school funds in the following words:

> Theoretically all the children of the state are equally important and are entitled to have the same advantages; practically this can never be quite true. The duty of the state is to secure for all as high a minimum of good instruction as is possible, but not to reduce all to this minimum; to equalize the advantages to all as nearly as can be done with the resources at hand; to place a premium on those local efforts which will enable communities to rise above the legal minimum as far as possible; and to encourage communities to extend their educational energies to new and desirable undertakings.[7]

These concepts were stated by Cubberley in 1905, but they seem quite applicable today. Numerous books, monographs, and articles have been written on state responsibility for education and state school financing, but it is difficult to find in all the literature on this subject a better or clearer statement than Cubberley's conceptualization. It is true, as will be pointed out later in this chapter, that Strayer and Mort at a later date criticized one part of Cubberley's conceptualization; but the differences that arose were on the technology of state distribution of school funds rather than the values or goals. The difference arose over the implementation of the phrase, " . . . to place a premium on those local efforts which will enable communities to rise above the legal minimum as far as possible. . . ."

After formulating his conceptualizations of sound policy in state school financing, Cubberley used them as criteria to evaluate the methods used by the states to distribute school funds at the beginning of the century. As Cubberley's study was the first comprehensive one to be made of state school funds, and as it was made at the very beginning of the twentieth century, his findings provide a valuable benchmark for measuring progress in state school financing. Therefore, some of his principal findings are set forth below:

1. That due to the unequal distribution of wealth, the demands set by the states for maintaining minimum standards cause very unequal burdens. What one community can do with ease is often an excessive burden for another.

2. That the excessive burden of communities, borne in large part for the common good, should be equalized by the state.

3. That a state school tax best equalizes the burdens.

4. That any form of state taxation for schools fails to accomplish the ends for which it was created unless a wise system of distribution is provided.

5. That (judged by Cubberley's criteria) few states (at the beginning of the twentieth century) had as yet evolved a just and equitable plan for distributing the funds they had at hand.

6. That "taxes where paid," property valuation, total population, and school census were all undesirable methods of apportionment.

7. That total enrollment, enrollment for a definite period, average membership, average daily attendance, and aggregate days attendance are each successive improvements over the census basis of apportionment.

8. That any single measure for distributing state funds is defective; but if one is used, the best single measure is the number of teachers employed.

9. That the best basis for distributing state funds is the combination of the teachers actually employed and aggregate days attendance.

10. That special incentive funds shall be provided to encourage communities to provide secondary education, kindergartens, manual training, evening schools, and so forth.

11. That a reserve fund should be established for the relief of those communities which have made the maximum effort allowed by law and yet are unable to meet the minimum demands made by the state.[8]

Harlan Updegraff

Updegraff is not as well known as some of the other theorists in state school financing, but his contributions are important. Although he accepted the concepts of Cubberley for the most part, he did make some important additions to Cubberley's model. Updegraff, a professor of educational administration at the University of Pennsylvania, made a survey of the financial support of rural schools in New York state in 1921 in which he presented some new concepts of state support.[9] These are the principles of state support he proposed:

1. Local support is fundamental.

2. The local units for the support of schools should contain, insofar as practicable, enough property taxable for school purposes to raise that portion of the expenses of the school which it is believed should be borne by the local districts without an undue burden upon the owners of property.

3. Some portion of the support of local schools should come from the state government, the amount being dependent upon certain factors, exact standards for which have not been scientifically determined, but which will vary in the different states.

4. The administration of state aid should be such as to increase the efficient participation of citizens in a democratic form of government.

5. The purpose of state aid should be not only to protect the state from ignorance, to provide intelligent workers in every field of activity, and to educate leaders, but also to guarantee to each child, irrespective of where he happens to live, equal opportunity to that of any other child for the education which will best fit him for life.[10]

Those were the days in which the word efficiency was greatly emphasized in administration. Therefore, it is not surprising that Updegraff presented a set of criteria for determining the efficiency of state support, a summary of which follows:

1. The efficient participation of citizens in the responsibilities of citizenship should be promoted by making the extent of the state's contribution dependent upon local action.

2. The state should neither be timid nor autocratic in withholding state funds because of deficiencies in local action.

3. Special grants should be provided to encourage the introduction of new features into the schools.

4. The districts should receive support in inverse proportion to their true valuation per teacher unit.

5. Efficiency in the conduct of schools should be promoted by increasing the state grant whenever the true tax rate is increased and by lowering it whenever the local tax is decreased.

6. The plan of state aid should be so framed that it will measure precisely the elements involved and will respond promptly and surely to any change in the local districts.[11]

Updegraff not only proposed principles and criteria for state support, but he developed techniques for the distribution of general school aid which embodied his ideas. He proposed a sliding scale that provided increased amounts of state aid per teacher unit for each increase of 1/2 mill of school taxes levied ranging from 3 1/2 to 9 mills,[12] but he provided proportionately more state aid for a district with a low true valuation per teacher unit.

Under Updegraff's plan, the state would support variable levels of minimum programs ranging from $840 per teacher unit to $2,160 depending upon the amount of local tax effort. He attempted to incorporate the concepts of equalization of educational opportunity and reward for effort within the same formula. As will be pointed out below, both Strayer and Mort opposed that approach. Updegraff justified his proposals for encouraging additional local effort on the basis of efficiency. Updegraff's ideas fell into disfavor for many years following the emergence of the concepts advanced by Strayer and Mort. However, today Updegraff's concept of a variable level foundation program depending upon the level of local effort is being utilized in some modern state support programs. It is not being justified on the basis of efficiency, but on the basis of providing an incentive for quality education.

Updegraff introduced another idea, the teacher unit, which today is incorporated in many state support programs. He suggested that instead of using teachers employed as a basis of state distribution, standard numbers of pupils per teacher should be fixed for different school levels, for urban and rural districts, and for different types of classes.[13]

George D. Strayer, Sr.

Strayer, like Cubberley, was interested in the total area of educational organization and administration, and he made major contributions in every sector. In none, however, did he make a greater contribution than in state school finance for he advanced the theoretical basis of school financing. Strayer first advanced his theories of school finance in Volume I of the Report of the Educational Finance Inquiry Commission which was published in 1923. This volume, *The Financing of Education in the State of New York*[14] by Strayer and Haig, devoted four pages to a theoretical conceptualization of the equalization of educational opportunity which has had a major impact on educational thought and policy.

So important has been the effect of this report that some selected excerpts from it are set forth below. The concept "equalization of educational opportunity" that prevailed at that time was described as follows:

> There exists today and has existed for many years a movement which has come to be known as the "equalization of educational opportunity" or the "equalization of school support." These phrases are interpreted in various ways. In its most extreme form the interpretation is somewhat as follows: The state should insure equal educational facilities to every child within its borders at a uniform effort throughout the state in terms of the burden of taxation; the tax burden of education should throughout the state be uniform in relation to tax-paying ability, and the provision for schools should be uniform in relation to the educable population desiring education. Most of the supporters of this proposition, however, would not preclude any particular community from offering at its own expense a particularly rich and costly educational program. They would insist that there be an adequate minimum offered everywhere, the expense of which should be considered a prior claim on the state's economic resources.[15]

Strayer and Haig stated that to carry into effect the principle of "equalization of educational opportunity" or "equalization of school support," it would be necessary:

> . . . (1) to establish schools or make other arrangements sufficient to furnish the children in every locality within

> the state with equal educational opportunities up to some prescribed minimum; (2) to raise the funds necessary for this purpose by local or state taxation adjusted in such manner as to bear upon the people in all localities at the same rate in relation to their tax-paying ability; and (3) to provide adequately either for the supervision and control of all the schools, or for their direct administration by a state department of education.[16]

Strayer and Haig then presented the following conceptual model for formulating a plan of state support which incorporated the principles they had outlined:

(1) A local school tax in support of the satisfactory minimum offering would be levied in each district at a rate which would provide the necessary funds for that purpose in the richest district.

(2) The richest district then might raise all of its school money by means of the local tax, assuming that a satisfactory tax, capable of being locally administered, could be devised.

(3) Every other district could be permitted to levy a local tax at the same rate and apply the proceeds toward the cost of schools, but

(4) since the rate is uniform, this tax would be sufficient to meet the costs only in the richest district and the deficiencies would be made up by state subventions.[17]

It will be noted that Strayer and Haig emphasized the equalization of the tax burden to support schools as well as the equalization of educational opportunity. However, they did not incorporate the reward for effort or incentive concepts in their state support model. They attacked these concepts, which had been advanced by Cubberley and Updegraff, in the following words.

> Any formula which attempts to accomplish the double purpose of equalizing resources and rewarding effort must contain elements which are mutually inconsistent. It would appear to be more rational to seek to achieve local adherence to proper educational standards by methods which do not tend to destroy the very uniformity of effort called for by the doctrine of equality of educational opportunity.[18]

Paul R. Mort

Mort was one of Strayer's students and later became his colleague at Teachers College, Columbia University. Strayer and Haig referred to a "satisfactory minimum program" to be equalized, but they offered no suggestions concerning how to measure it. Mort assumed the task of defining a satisfactory minimum program as his doctoral problem. His doctoral dissertation, *The Measurement of Educational Need,*[19] was published in 1924.

Mort perhaps should be classified a disseminator and developer,[20] but he was a theorist as well. Although he accepted completely the conceptualization of Strayer and Haig, he somewhat clarified their theories, and he advanced some concepts of his own concerning the formulation of a state minimum program. Therefore, some of the key ideas developed by Mort in his dissertation are presented below.

Mort presented an extremely advanced concept of what should be included in the state-assured minimum program. These are the elements he recommended for inclusion:

> (1) An educational activity found in most or all communities throughout the state is acceptable as an element of an equalization program.
>
> (2) Unusual expenditures for meeting the general requirements due to causes over which a local community has little or no control may be recognized as required by the equalization program. If they arise from causes reasonably within the control of the community they cannot be considered as demanded by the equalization program.
>
> (3) Some communities offer more years of schooling or a more costly type of education than is common. If it can be established that unusual conditions require any such additional offerings, they may be recognized as a part of the equalization program.[21]

Mort modestly stated that " . . . it cannot be hoped that these will prove exhaustive as the thinking in this field develops."[22] However, his concepts of the elements to include in a minimum program are as valid today as when they were written. For example, his third element includes compensatory education for the disadvantaged, which is a comparatively recent extension of the educational offering.

Mort defined a satisfactory equalization program as follows:

> A satisfactory equalization program would demand that each community have as many elementary and high school classroom or teacher units, or their equivalent, as is typical for communities having the same number of children to educate. It would demand that each of these classrooms meet certain requirements as to structure and physical environment. It would demand that each of these classrooms be provided with a teacher, course of study, equipment, supervision, and auxiliary activities meeting certain minimum requirements. It would demand that some communities furnish special facilities, such as transportation.[23]

Mort sought objective, equitable measures of educational need that could be used by a state legislature in determining the amount of the state appropriation for equalization. He also wished his measure to be used by officials in the state department of education for apportioning state school funds with a minimum of state control.

Mort used complicated sets of regression equations to estimate on the basis of average practice the typical number of teachers employed in elementary schools that varied in numbers of pupils. He assumed that sparsity of population would make it necessary for some districts to operate certain small schools which would not have the economies of scale provided by larger schools. In other words, he assumed that a greater number of teachers for a given number of pupils would need to be employed in the small schools than in the large schools. His statistical studies, based on average practice in New York State at that time, showed that more teachers were employed per pupil in elementary schools with an average daily attendance of less than 142, but that the average number of teachers per pupil employed for larger elementary schools did not vary substantially. He found that the number of pupils per teacher varied in high schools up to 518 in average daily attendance but did not vary substantially in high schools above that size. He developed separate regression equations for both elementary and high schools. One could take the average daily attendance of any size school, substitute it in the appropriate equation, and compute the number of either typical elementary teachers or typical high school teachers.[24]

Mort's concept of "weighting pupils" was later extended to include weighting pupils enrolled in vocational education, exceptional education and compensatory education in order to provide for the extra costs of these special programs.

Most foundation programs today use some form of the weighted teacher or weighted pupil measure.[25] The weights, of course, have changed, as well as the methods of determining them, but the concept of making allowance for necessary cost variations beyond the control of local boards of education is generally recognized as sound policy.

Mort directed a national study of state support in 1931. The report of this survey entitled *State Support for Public Education* contained a summary of the status of state support at that time. Following is a brief summary of his findings concerning the condition of state support in 1931-32:

1. In all but a few states, the actual minimum status of education was determined by the economic ability of local districts to support schools rather than the social needs for education.
2. The minimum program actually guaranteed was in nearly every state far below the program provided in communities of average wealth.
3. An analysis of the methods used by the different states to measure educational need revealed that no state was using as refined measures as were available. Measures in use were inequitable in one or more of the following respects: treatment for variation of size of school, treatment of districts of the same size, caring for the higher costs of high schools, caring for nonresidence, consideration of costs of living, consideration of transportation and consideration of capital outlays.[26]

Henry C. Morrison

Morrison is sometimes forgotten by those studying the theory of state school financing. He is perhaps more noted for his theories of instruction and curriculum than for his theories in school finance. However, Morrison wrote an important book, *School Revenue*,[27] in which he made some significant contributions to the literature on school finance. He noted the great inequalities of wealth among school districts that caused great inequalities in educational opportunity. He observed that constitutionally education was a state function and that local school districts had failed to provide that function efficiently or equitably. He asserted that attempts to provide equal educational opportunities by enlarging school districts, by offering state equalization funds—such as those advocated by Mort—or by offering state subsidies for special purposes had failed. He theorized that those measures would continue to fail to meet educational needs and, at the same time, to provide an equitable system of taxation to support schools. Therefore, Morrison proposed a model of state support whereby all local school districts are abolished and the state itself becomes both the unit for taxation for schools and for administration of public schools. He suggested that the most equitable form of tax for the state to use for the support of schools was the income tax.

Morrison's ideas on state school finance were not well received. At that time, great emphasis was being given to local initiative and local home rule. In fact, local self-government was almost equated to democracy itself in the political thought of Morrison's time. The Cubberley, Updegraff, Strayer, Haig, Mort axis of thought was in the mainstream of American political thought and, therefore, widely accepted.

However, the defects that Morrison saw in local school financing are as evident today as in his time. Furthermore, educational opportunities are far from being equalized among school districts within most states, and there is more complaint about the inequities of local property taxes for schools than ever before. It is interesting to note that in recent years Hawaii has established a state system of education with no local school districts that is similar to the model advocated by Morrison. The federal Elementary and Secondary Education Act of 1965 was enacted by Congress largely for the purposes of remedying some of the defects of the American system of education that Morrison foresaw if the states continued to rely largely on local school districts to perform state functions. Morrison's model for state school financing is not as far outside of the mainstream of American thought today as it was in 1930.

SOME TRENDS IN SCHOOL FINANCING 1890-1930

The first section of this chapter is devoted to a discussion of the development of the basic theories and concepts of state support. Practically all of these theories were developed prior to

TABLE 1-1

AMOUNT OF PUBLIC SCHOOL REVENUE DERIVED FROM FEDERAL AND STATE SOURCES, 1890-1930*

State	*1890*	*1900*	*1910*	*1920*	*1930*
Continental United States	(1) $ 33,987,581	(2) $ 44,317,952	(3) $ 78,701,256	(4) $162,559,399	(5) $372,189,813
Alabama	$ 609,667	$ 907,000	$ 2,125,931	$ 4,381,514	$ 8,076,071
Arizona	1,783	11,100	64,715	966,974	2,207,727
Arkansas	536,112	446,558	1,301,484	1,856,574	3,913,085
California	2,627,471	3,505,268	5,348,316	8,679,325	26,531,318
Colorado	112,702	117,548	134,050	1,211,856	863,418
Connecticut	401,716	474,183	776,377	1,855,244	3,428,103
Delaware	65,263	66,000	195,633	579,740	4,589,880
Florida	116,777	124,449	196,062	454,444	2,764,847
Georgia	576,786	1,323,153	2,328,062	3,968,662	4,806,544
Idaho	—	205,329	293,850	663,146	827,833
Illinois	1,709,651	1,900,184	1,881,549	5,695,218	4,054,786
Indiana	2,053,172	2,174,062	3,190,713	4,294,196	4,579,763
Iowa	266,338	118,139	991,706	522,328	2,129,137
Kansas	306,982	421,134	502,159	600,181	662,572
Kentucky	1,310,109	1,448,129	3,500,000	2,920,773	5,840,801
Louisiana	302,633	342,409	1,087,733	2,415,615	5,358,745
Maine	407,298	520,019	1,199,383	2,219,083	3,196,175
Maryland	616,205	779,144	1,527,991	2,066,126	3,952,035
Massachusetts	282,081	168,850	424,849	4,459,624	8,224,805
Michigan	791,882	1,020,283	5,707,562	7,147,690	20,199,913
Minnesota	816,688	1,296,466	2,983,898	6,090,635	10,155,250
Mississippi	515,032	810,667	1,617,252	2,097,426	6,202,603
Missouri	1,512,874	1,489,306	2,518,043	3,685,515	5,412,890
Montana	—	—	180,824	1,141,140	1,970,414
Nebraska	629,030	693,205	622,786	1,031,224	1,410,607
Nevada	64,611	125,341	200,281	372,969	475,317
New Hampshire	73,596	39,047	111,704	346,973	639,921
New Jersey	2,071,497	2,516,147	3,214,555	13,808,944	21,629,445
New Mexico	—	402,698	58,694	644,740	1,550,264
New York	3,531,696	3,745,000	5,296,570	12,922,152	89,058,759

North Carolina	558,773	817,309	264,571	3,470,717	6,969,000
North Dakota	127,123	446,626	1,086,792	1,435,620	1,403,183
Ohio	1,982,038	2,028,485	2,610,245	4,279,559	5,701,577
Oklahoma	—	129,653	525,013	1,472,354	3,347,790
Oregon	151,188	203,408	320,272	470,424	454,506
Pennsylvania	1,492,664	5,493,028	7,202,595	11,682,344	23,891,063
Rhode Island	127,972	137,138	196,624	258,423	1,197,749
South Carolina	372,019	533,639	82,244	1,003,075	3,980,838
South Dakota	174,687	253,234	581,256	1,724,548	1,725,780
Tennessee	1,748,133	129,413	706,332	1,575,002	5,366,686
Texas	2,562,773	3,326,492	5,994,297	17,443,152	32,341,298
Utah	163,493	328,455	704,963	2,034,154	3,755,922
Vermont	67,550	139,472	295,859	1,155,001	692,658
Virginia	837,673	1,011,815	1,701,010	4,352,275	6,372,246
Washington	—	918,465	2,625,823	3,669,944	8,497,710
West Virginia	366,639	411,205	750,000	738,040	2,173,777
Wisconsin	785,341	776,132	1,800,710	3,729,441	7,946,581
Wyoming	—	43,265	150,213	750,272	1,658,421

---

*Adapted from *The National Survey of School Finance-State Support for Public Education* by Paul R. Mort and Staff. Washington, D. C.: The American Council on Education, 1933.

26

1930. This section deals with some major trends in school financing between 1890 and 1930.

Mort made a study of trends in state support, 1890-1930.[28] Table 1-1 is adapted from that study. In that study, Mort did not distinguish between state and federal funds. But since federal funds, exclusive of sixteenth section funds, comprised only 0.3 percent of total school revenue by 1930, Table 1-1 can be considered as a valid presentation of trends in state funds. It will be noted that these funds increased from approximately $34,000,000 in 1890 to approximately $372,000,000 in 1930.

Table 1-2 shows trends in percent of revenue from state and federal sources from 1890 to 1930. It will be noted that state funds (including a negligible amount of federal funds) declined from 23.8 percent of total revenue in 1890 to 17.3 percent in 1930. This decline in percentage of total revenue was not due to a decline in state revenue but rather due to large increases in local school revenue, especially during the decade following World War I. The demands for public education, especially for universal secondary education became insistent during that decade. However, the taxpayer in local school districts provided proportionately more of the school revenue to meet that demand than did state legislatures.

TRENDS IN STATE SUPPORT 1930-1970

In this section trends in total expenditures, trends in revenue by level of government and trends in percent of revenue from state sources by state are presented.

Trends in Total Expenditure

Expenditures for the public schools have increased greatly since 1930 as determined by any valid method of measurement. An analysis of increases in school expenditures since 1930 is presented in Table 1-3. Column 2 of this table shows that total expenditures for the public schools (uncorrected for the decreased purchasing power of the dollar and increased attendance) increased from $2,307,000,000 to $39,489,000,000 or 1,612 percent between 1930 and 1970. This is an invalid measure of increases in school cost but it is the figure that frightens taxpayers. Column 3 of Table 1-3 shows that the cost of living increased 114 percent between 1929 and 1969. When expenditures for all years are

TABLE 1-2

PERCENTAGE OF PUBLIC SCHOOL REVENUE DERIVED FROM FEDERAL AND STATE SOURCES, 1890-1930*

State	*1890*	*1900*	*1910*	*1920*	*1930*
Continental United States	23.8	20.3	18.1	16.8	17.3
Alabama	67.7	82.3	74.1	51.3	40.8
Arizona	1.0	4.0	7.4	18.7	19.6
Arkansas	48.9	31.1	35.3	23.7	33.7
California	51.6	48.7	28.1	20.4	25.6
Colorado	5.2	4.0	2.3	9.0	3.2
Connecticut	19.9	15.9	14.0	12.3	8.1
Delaware	26.1	24.0	32.7	35.3	87.9
Florida	22.6	18.3	13.5	7.2	22.8
Georgia	56.5	64.4	53.0	43.5	35.6
Idaho	—	40.4	14.0	9.7	7.7
Illinois	14.3	10.2	5.2	8.7	5.3
Indiana	36.9	29.2	21.0	10.6	5.5
Iowa	3.9	1.4	7.5	1.5	4.3
Kansas	7.2	9.4	6.1	2.3	1.7
Kentucky	59.3	52.6	53.0	37.1	26.1
Louisiana	37.2	30.0	25.3	24.5	26.9
Maine	30.9	29.2	36.5	35.6	28.6
Maryland	34.4	26.5	39.2	41.6	17.7
Massachusetts	3.4	1.2	2.0	12.3	9.5
Michigan	14.0	15.3	41.1	17.1	18.2
Minnesota	18.1	22.7	20.8	19.5	20.6
Mississippi	44.3	59.4	55.2	52.1	33.5
Missouri	18.9	20.8	19.4	11.9	10.6
Montana	—	—	6.7	9.9	14.1
Nebraska	19.2	17.4	8.9	6.6	5.4
Nevada	35.0	55.5	35.0	26.6	19.0
New Hampshire	9.8	3.9	7.0	8.7	9.0
New Jersey	62.3	40.6	17.6	35.6	21.2
New Mexico	—	91.5	7.8	17.6	21.8
New York	19.8	10.9	9.6	12.1	27.6
North Carolina	77.4	82.9	9.0	30.1	16.6
North Dakota	21.1	30.7	20.5	12.1	11.1
Ohio	19.0	15.2	10.2	7.3	4.1
Oklahoma	—	18.1	15.8	7.5	10.6
Oregon	16.4	12.4	6.9	4.8	2.3
Pennsylvania	10.6	22.0	15.6	15.9	13.9
Rhode Island	13.1	9.4	8.6	5.2	8.6
South Carolina	82.7	65.5	3.9	15.8	25.5
South Dakota	14.8	13.7	14.9	16.6	10.1
Tennessee	81.7	7.2	15.9	17.8	24.7
Texas	79.9	75.0	57.2	54.0	42.6
Utah	47.3	28.2	26.8	31.5	33.6
Vermont	9.5	15.7	19.8	33.1	12.2
Virginia	52.7	50.4	39.1	36.7	27.9
Washington	—	43.8	28.4	18.1	28.9
West Virginia	28.2	20.2	19.0	6.4	8.3
Wisconsin	19.5	13.3	15.8	15.6	17.0
Wyoming	—	14.8	19.5	24.3	27.1

*Adapted from *The National Survey of School Finance-State Support for Public Education* by Paul R. Mort and Staff. Washington, D. C.: The American Council on Education, 1933.

TABLE 1-3

TRENDS IN TOTAL EXPENDITURES FOR THE PUBLIC SCHOOLS 1930-1970
(Includes All Items for Current Expense, Capital Outlay and Interest on School Indebtedness)

Year *Column 1*	*Expenditures in Current Dollars (Millions)* *Column 2*	*Consumer Price Index (1957–59 Prices = 100)* *Column 3*	*Expenditures in Terms of 1969 Dollars (Millions)* *Column 4*	*Average Daily Attendance (Thousands)* *Column 5*	*Expenditures Per Pupil In ADA In 1969 Dollars* *Column 6*	*Percentage of the Gross National Product Expended for the Public Schools* *Column 7*
1929–30	$ 2,307	59.7	$ 4,935	21,165	$233	2.2
1939–40	2,331	48.4	6,149	22,042	279	2.6
1949–50	5,768	83.0	8,877	22,284	398	2.2
1959–60	15,613	101.5	19,641	32,477	605	3.2
1969–70	39,489	127.7	39,489	42,168	936	4.2
Percent Increase 1929–30 to 1969–60	1,612	114	700	99	302	91

Source: Data on expenditures and average daily attendance from the U. S. Office of Education except for the year 1969–70 which was estimated by the National Education Association. The price index is for the calendar year in which the school year began. Also, the gross national product for the calendar year in which the school year began is used in computing the percentage of the gross national product. Data for the price index were obtained from the *Survey of Current Business.*

converted into the purchasing power of 1969 dollars, it is noted from Column 4 that the total increased 700 percent. But average daily attendance increased 99 percent during this 40 year period and Column 6 shows that the expenditure per pupil in terms of the purchasing power of 1969 dollars increased from $233 to $936 or 302 percent between 1929-30 and 1969-70. This is a fairly valid measure of the increase in school expenditures, however, it does not take into consideration the increases in the types of educational services rendered, some of which, such as vocational education and education for exceptional children are very expensive. Furthermore, this figure does not take into consideration the increase in the quality of the services rendered. It is not possible to measure objectively the cost of providing this increase in the quality of the educational services provided.

Another way of measuring the increase in costs of education is to compare the increase in expenditures for education during the past forty years with the increase in the gross national product. Column 7 of Table 1-3 shows that 2.2 percent of the gross national product was expended for the public schools in 1929-30 and 4.2 percent in 1969-70. This is a substantial increase of 91 percent. The growth of the national economy has made the great increases in expenditures for education possible. However, education has contributed greatly to the growth of the national economy.[29]

Trends in Revenue by Level of Government

Trends in revenue for the public schools from 1929-30 to 1969-70 from federal, state and local sources are presented in Table 1-4. It is noted from this table that school revenues from each level of government have increased substantially during the past forty years but the percentage of the total from each level has changed. The proportion from the federal government increased from 0.3 percent to 6.6 percent; increased from state sources from 17.0 percent to 40.7 percent; and decreased from local sources from 82.7 percent to 52.7 percent. About 98 percent of all local school tax revenue is derived from property taxes. Numerous studies have shown that the property tax in modern times is the most inequitable of all major types of taxes.[30] Although there has been a trend during the past forty years to increase the percentages of school revenue provided from state and

Table 1-4

Trends in Sources of School Revenue Receipts
by Level of Government
(In Millions of Current Dollars)

	Federal		*State*		*Local*		*Total*	
Year	*Amount*	*Per-Cent*	*Amount*	*Per-Cent*	*Amount*	*Per-Cent*	*Amount*	*Per-Cent*
1929–30	7	0.3	354	17.0	1,728	82.7	2,089	100.0
1939–40	40	1.8	685	30.3	1,536	67.9	2,261	100.0
1949–50	156	2.9	2,166	39.8	3.155	57.3	5,437	100.0
1959–60	649	4.4	5,766	39.1	8,332	56.5	14,747	100.0
1969–70	2,545	6.6	15,645	40.7	20,286	52.7	38,476	100.0

Source of Data: U. S. Office of Education except for the year 1969–70 which was estimated by the National Education Association.

federal sources, the major portion of school revenue was still obtained from local sources in 1970.

Trends in Revenue from State Sources by State

Table 1-5 shows the amount of revenue provided from state sources by state from 1930 to 1970 by decades. This table shows that the total amount of school revenue for the nation from state sources increased each decade during the past forty years. The total amount of school revenue from state sources in current dollars (uncorrected for differences in the purchasing power of the dollar) increased 77.3 percent between 1930 and 1940; the increase was 228.2 percent between 1940 and 1950; 164.2 percent between 1950 and 1960; and 173.4 percent between 1960 and 1970. The percentage increase in state funds was the greatest in the 1940-1950 decade but the dollar increase was the greatest in the decade 1960-1970. Although a few states did not increase the amount of state funds each decade, all states increased the total amount of state funds for the public schools between 1930 and 1970.

Table 1-6 shows the percent of school revenue provided from state services for each state by decade from 1930 to 1970. It will be noted from this table that the percent of school revenue obtained from state sources increased from 17.3 percent[31] in 1930 to 40.7 percent in 1970. This is a major shift in sources of revenue. However there has been very little change in the percent of revenue from state sources during the past 20 years. In

TABLE 1-5

PUBLIC SCHOOL REVENUE DERIVED FROM STATE SOURCES, 1930-1970
(In thousands)

State	*1930*	*1939–40*	*1949–50*	*1959–60*	*1969–70*
U.S. Overall	$372,193	$659,868	$2,165,689	$5,721,937	$16,645,366
Alabama	8,076	11,954	53,527	121,873	257,717
Alaska	—	—	—	—	38,489
Arizona	2,208	2,204	11,546	44,512	165,127
Arkansas	3,913	6,084	26,339	44,209	112,384
California	26,531	78,234	236,753	754,793	1,550,000
Colorado	863	1,179	9,927	32,498	106,000
Connecticut	3,428	2,762	15,376	78,982	210,000
Delaware	4,590	4,124	10,141	42,700	87,900
Florida	2,765	12,402	50,138	194,970	608,727
Georgia	4,807	15,409	51,863	154,046	377,546
Hawaii	—	—	—	—	149,000
Idaho	828	1,108	5,478	15,111	51,000
Illinois	4,055	13,301	58,185	168,739	797,649
Indiana	4,580	18,584	56,484	109,942	360,000
Iowa	2,129	472	18,298	24,981	167,000
Kansas	663	3,316	20,668	38,860	117,404
Kentucky	5,841	10,570	23,992	69,025	235,000
Louisiana	5,359	14,274	73,889	192,809	331,890
Maine	3,196	1,778	7,121	15,665	78,500
Maryland	3,952	5,586	29,747	88,038	300,901
Massachusetts	8,225	7,937	26,750	63,439	200,000
Michigan	20,200	41,902	143,387	327,355	770,000
Minnesota	10,155	16,120	41,104	127,613	365,000
Mississippi	6,203	6,053	18,549	77,541	162,000
Missouri	5,413	17,572	40,687	85,861	255,972
Montana	1,970	944	7,374	16,144	45,000
Nebraska	1,411	180	2,669	6,656	42,378
Nevada	475	439	2,447	15,300	40,500
New Hampshire	640	396	947	2,376	9,400
New Jersey	21,629	6,003	34,656	127,508	429,000
New Mexico	1,550	3,955	28,549	68,812	128,174
New York	89,059	117,508	238,496	653,389	2,071,000
North Carolina	6,969	26,752	91,294	185,917	571,559
North Dakota	1,403	1,342	6,142	14,429	28,500
Ohio	5,702	48,529	81,924	205,483	560,000
Oklahoma	3,348	13,080	46,106	51,182	142,934
Oregon	455	75	20,679	52,962	97,000
Pennsylvania	23,891	36,715	117,279	388,970	1,039,369
Rhode Island	1,198	1,202	4,503	11,485	51,259
South Carolina	3,981	8,126	32,820	95,833	245,000
South Dakota	1,726	1,029	2,838	4,858	14,500
Tennessee	5,367	8,633	53,255	109,708	257,000
Texas	32,341	34,314	170,729	362,849	775,000
Utah	3,756	4,453	15,824	41,021	111,615
Vermont	693	771	3,230	6,830	21,040
Virginia	6,372	8,469	34,692	89,539	300,000
Washington	8,498	18,555	68,652	185,055	400,000
West Virginia	2,174	14,273	45,311	65,350	134,500
Wisconsin	7,947	8,100	20,978	70,290	256,932
Wyoming	1,658	240	6,383	16,931	18,500

Source of Data: United States Office of Education except for the year 1969–70 which was estimated by the National Education Association.

TABLE 1-6

PERCENTAGE OF SCHOOL REVENUE DERIVED FROM STATE SOURCES, 1930-1970
(In thousands)

State	*1930*	*1940*	*1950*	*1960*	*1970*
U.S. Overall	17.3*	29.2	39.8	39.4	40.7
Alabama	40.8	54.1	71.6	65.3	63.0
Alaska	—	—	—	—	43.7
Arizona	19.6	18.8	33.8	34.0	47.5
Arkansas	33.7	43.2	58.1	46.6	45.5
California	25.6	45.9	41.3	40.6	35.0
Colorado	3.2	5.0	20.2	19.5	25.3
Connecticut	8.1	8.7	23.6	34.6	33.1
Delaware	87.9	84.4	83.5	82.5	70.6
Florida	22.8	50.4	50.8	56.5	56.5
Georgia	35.6	56.8	57.4	64.0	58.7
Hawaii	—	—	—	—	87.0
Idaho	7.7	10.7	23.5	27.6	43.2
Illinois	5.3	10.0	16.5	20.6	34.4
Indiana	5.5	32.2	37.4	29.9	34.9
Iowa	4.3	1.1	19.1	12.0	30.1
Kansas	1.7	10.9	24.0	19.2	26.1
Kentucky	26.1	40.0	35.1	45.8	52.6
Louisiana	26.9	52.3	69.6	70.2	58.3
Maine	28.6	15.6	27.8	25.8	44.9
Maryland	17.7	21.6	38.3	34.2	35.2
Massachusetts	9.5	10.0	20.5	20.0	20.0
Michigan	18.2	41.6	53.4	43.2	45.1
Minnesota	20.6	31.7	36.2	39.7	43.4
Mississippi	33.5	37.1	47.8	56.5	51.6
Missouri	10.6	32.1	38.9	31.0	34.5
Montana	14.1	7.2	25.3	23.6	30.9
Nebraska	5.4	1.0	6.2	6.5	20.0
Nevada	19.0	17.0	36.5	51.3	39.2
New Hampshire	9.0	5.1	6.2	6.3	8.5
New Jersey	21.2	5.5	19.0	23.7	28.5
New Mexico	21.8	45.3	86.0	74.4	62.7
New York	27.6	33.1	40.0	39.5	45.4
North Carolina	16.6	65.8	67.5	66.7	70.9
North Dakota	11.1	12.8	27.0	26.4	27.2
Ohio	4.1	35.3	31.4	27.7	31.6
Oklahoma	10.6	34.0	56.5	27.7	40.8
Oregon	2.3	.4	28.6	29.3	20.6
Pennsylvania	13.9	21.0	35.1	45.8	46.9
Rhode Island	8.6	10.3	20.2	23.2	34.5
South Carolina	25.5	48.6	55.2	66.6	61.6
South Dakota	10.1	7.6	12.1	8.9	13.6
Tennessee	24.7	33.3	56.9	58.0	49.3
Texas	42.6	39.4	61.8	50.0	42.8
Utah	33.6	37.3	50.3	44.0	51.4
Vermont	12.2	14.5	27.6	24.8	28.6
Virginia	27.9	31.2	39.6	37.0	36.6
Washington	28.9	57.9	65.6	61.6	58.8
West Virginia	8.3	50.7	62.7	52.9	48.2
Wisconsin	17.0	17.2	17.4	22.6	29.4
Wyoming	27.1	4.3	42.0	47.5	25.4

Source of Data: United States Office of Education except for the year 1970 which was estimated by the National Education Association.

*Includes 0.3 percent of federal funds.

1949-50 state sources provided 39.8 percent of school revenue which is only 0.9 percent less than the percent provided in 1969-70.

Only three states, New Hampshire, Delaware and Wyoming, provided a lower percent of revenue from state sources in 1969-70 than in 1929-30.

SOME POLITICAL, ECONOMIC AND HISTORICAL FACTORS INFLUENCING STATE SUPPORT[32]

Many of the basic problems and issues of state school finance cannot be separated from the problems and issues of federal and local public school financing. What should public education cost? What percent of the gross national product should be allocated to the public schools? These questions can never be finally answered because conditions are continually changing and, therefore, the answers are continually changing. It is true that less than 2 percent of the gross national product was allocated to the public schools at the beginning of the century and approximately 4.2 percent in 1970. But no governmental authority at the federal, state, or local level ever made any conscious decision concerning what percent of the gross national product should be allocated to the operation of public schools. The 4.2 percent of the gross national product allocated to the public schools in 1970 was merely the summation of the results of thousands of battles for revenue fought in the 18,000 local school districts of the United States, hundreds of battles in the 50 state legislatures, and dozens of battles in Congress. The percent of the gross national product that has been allocated to public education since the beginning of this century has borne only an accidental relationship to school needs.

Perhaps this unplanned method of allocating the gross national product to different sectors of the economy is the natural condition in a mixed private enterprise-government economy such as we have in the United States. In the private sectors of our economy, the gross national product is allocated in the marketplace; in the government sector, it is allocated through political processes.

Political and economic factors and historical events, such as wars, depressions, and threats to national security, all have had some effect on the development of state aid. These same factors also have had some effect on federal aid, which actually is easier to trace. But that is not the task of this chapter. Let us examine briefly, then, some of the effects of these factors and events on state aid.

As has already been pointed out, Cubberley noted at the beginning of the twentieth century that the industrialization of the nation had created great inequalities in wealth among school districts. This same fact was noted by every researcher on state aid, and it was used as a powerful argument for state aid. Advocates of state aid have continuously appealed throughout this century for the extension of state aid programs in order to equalize educational opportunity. Why has it taken so long to develop adequate state aid programs throughout the nation? Why did many states still have inadequate state aid programs as late as 1970? The causes of the successes and failures in the development of state aid programs no doubt have varied greatly from state to state, for they vary greatly in their political liberalism versus their political conservatism. The political liberal considers it the responsibility of central government to equalize educational opportunity by means of adequate programs of state or federal aid. The political conservative fears the control of central governments and is willing to sacrifice the ideal of equalization of educational opportunity in order to preserve "home rule" in government. He considers it socialist doctrine to advocate the taxing of wealth in rich school districts or rich states in order to equalize educational opportunities among school districts and among states.

The conservative point of view with respect to state aid prevailed in most states throughout the first two decades of the twentieth century. Liberal arguments, such as those voiced by Cubberley, fell largely on deaf ears. However, this attitude began to change after World War I, a war we fought "to make the world safe for democracy." We may have failed to make the world safe for democracy, but the war undoubtedly caused us to want more democracy in education in the United States. Young men from all over the United States were brought together in the armed services, and great differences were noted in the education of men from different sections of the nation. A national demand developed to make the opportunity for a high school education universal. The demand for the extension of opportunities for high school education in the years immediately following World War I served as a great stimulus to the development of state aid.

World War I also accelerated the rate of change of the United States from an agrarian to an industrial society. The war started the breaking up of the parochialism and the isolation of rural America. The automobile industry, led by the Model T, further promoted the mobility of the population. An industrialized, mobile population needed much more education than an isolated rural population. This fact had long been known to the educational leadership of the states. It began to be recognized by the state political leadership in the decade following World War I. State aid for the public schools more than doubled between 1920 and 1930.

The Great Depression had a profound effect on school financing. In 1930, about 82 percent of school revenue came from local sources, and practically all local school tax revenue was derived from property taxes. During the Depression, property taxes became increasingly onerous as thousands of people lost their homes, farms, and businesses. The injustice of being required to pay property taxes when the taxpayer had no income became a political issue in many states. The opposition to property taxes during this period provided an opportunity for the advocates of state aid to advance their programs.

World War II also had an important effect on school financing, for it accelerated the development of technology nationally, even more than World War I. It became apparent to all informed observers, during and immediately after World War II, that an education was a necessity not only for the benefit of the individual but also for the welfare of society. The demands for an improved quality of education became insistent throughout the nation. Furthermore, inflation was causing a rapid increase in prices that far exceeded any increase in the property tax income of the schools. The problem was further complicated by a "baby boom" starting in 1946 and continuing throughout the 1950's.

Studies were conducted in many states in order to deal with this situation. There was a great demand to find sources of revenue for the public schools that would correspond more closely with price changes and school enrollment than property taxes. Furthermore, the ownership of property was becoming less related to the sources of the income of the people. For example, 58 percent of the national income was derived from compensation of employees in 1929, but this had increased to more than 72 percent in 1969.

This chapter has presented a brief history of the development of state support for the public schools. Chapters 2, 3, 4 and 5 of this volume present information by which the state financing system of each of the states may be evaluated.

FOOTNOTES

1. Paul R. Mort, *The National Survey of School Finance: State Support for Public Education* (Washington, D. C.: The American Council on Education, 1933, p. 24).
2. *Ibid.*, p. 26.
3. In this chapter, the terms "state support" and "state aid" are used interchangeably.
4. This section is abstracted largely from Chapter 4, "State Financing of Elementary and Secondary Schools" by R. L. Johns in *Education in the States: Nationwide Development Since 1900*, Edgar Fuller and Jim B. Pearson, eds. (Washington, D. C.: National Education Association, 1969).
5. Ellwood P. Cubberley, *School Funds and Their Apportionment* (New York: Teachers College, Columbia University, 1905).
6. *Ibid.*, p. 16.
7. *Ibid.*, p. 17.
8. *Ibid.*, adapted from the summary presented on pp. 250-54.
9. Harlan Updegraff, *Rural School Survey of New York State: Financial Support* (Ithaca: By the author, 1922).
10. *Ibid.*, p. 117.
11. *Ibid.*, pp. 117-18.
12. *Ibid.*, pp. 134-35.
13. *Ibid.*, p. 155.
14. George D. Strayer and Robert Murray Haig, *The Financing of Education in the State of New York*, Report of the Educational Finance Inquiry Commission, Vol. I (New York: Macmillan Co., 1923).
15. *Ibid.*, p. 173.
16. *Ibid.*, p. 174.
17. *Ibid.*, pp. 174-75.
18. *Ibid.*, p. 175.
19. Paul R. Mort, *The Measurement of Educational Need* (New York: Teachers College, Columbia University, 1924).
20. See Stephen K. Bailey, et al., *Schoolmen and Politics: A Study of State Aid to Education in the Northeast* (Syracuse, N.Y.: Syracuse University Press, 1962).
21. Mort, *The Measurement of Educational Need*, pp. 6-7.
22. *Ibid.*, p. 7.
23. *Ibid.*, p. 8.
24. In later years, Mort's "typical teacher" came to be known as "weighted teacher" or "weighted instruction unit" in some states.
25. Today the term *foundation program* is more commonly used than the terms *equalization program* or *minimum program*.

26. Paul R. Mort and Research Staff, ***State Support for Public Education*** (Washington, D. C.: American Council on Education, 1933).

27. Henry C. Morrison, ***School Revenue*** (Chicago: University of Chicago Press, 1930).

28. Paul R. Mort and Research Staff, ***State Support for Public Education*** (Washington, D.C.: American Council on Education, 1933).

29. See ***Economic Factors Affecting the Financing of Education,*** Vol. 2 of the National Educational Finance Project, edited by Roe L. Johns, Irving J. Goffman, Kern Alexander and Dewey Stollar. (Gainesville, Florida, 1212 S.W. 5th Avenue, The Project Office, 1971).

30. *Ibid.,* Chapters 8 and 10.

31. This figure includes 0.3 percent of federal funds.

32. This section is adapted from Chapter 4, "State Financing of Elementary and Secondary Schools" by R. L. Johns in *Education in the States: Nationwide Development Since 1900.* Edgar Fuller and Jim B. Pearson, eds. (Washington, D.C.: National Education Association, 1969).

CHAPTER 2

Classification of State School Funds

KERN ALEXANDER, OSCAR HAMILTON
AND
DOUGLAS FORTH

No two states finance their public schools in the same way. While each state, except Hawaii, utilizes both state and local tax sources, the amounts contributed by level of government and the methodology used to combine the state and local tax dollars are different in every state.

Many factors, historic, social, economic, geographic, and psychological are undoubtedly responsible for this diversity. For example, the historical development of Hawaii as a territorial government has led to the adoption of a centralized system of finance whereby allocation decisions are made almost totally at the state level. In New England and in some parts of the Midwest, the "town meeting" philosophy still prevails to a large extent, and is reflected in school finance programs which generally depend on local rather than state taxation and decision making. On the other hand, in the Southeast, social and economic conditions have probably worked in concert to form larger school districts, and in some of these states county unit school systems have been legislatively mandated. The reorganization and consolidation of smaller districts in the South may have gained primary impetus from a lack of local fiscal ability, causing creation of larger, more efficient units. In any case, as persons versed in the history of American education can testify, the array of conditions causing educational differences in states are endless. The simple fact of the matter is that each state's educational program has developed in a separate and sovereign state government, and except for federal constitutional and statutory influences, each has developed, more or less independently, its own fiscal and educational structure.

The idiosyncrasies of the states are manifested in variations in governmental levels of support—high and low percentages of state aid, specificity of grants leading to more or less state control of funds, varying degrees of equalization among school districts—and in types of educational programs identified by state legislatures.

The purpose of this chapter is to classify and describe the array of fiscal mechanisms by which states redistribute tax dollars for the public schools. To accomplish this, state school aid programs are classified by method and by purpose.

DESCRIPTION OF STATE SCHOOL FINANCE PROGRAMS

Few attempts have been made to classify and describe the methods by which states allocate funds to local school districts. Over the last quarter of a century, the United States Office of Education has sporadically made reports on the status of school finance in the United States. A few of these studies have focused on the purposes and methods adopted by each state to finance education. Such descriptive studies are, in and of themselves, rather monumental when one considers the problems inherent in attempting to describe over 400 school finance funds in 50 states, with each state having its own vocabulary, information system and reporting techniques.

By reviewing these U. S. Office of Education publications, one can identify two commonly used methods for describing systems of state school finance. One of these methods categorizes the various state school funds into what is called *general* and *special* grants. The *general* grant is usually the large basic state aid program which is non-restrictive and can be used with wide local discretion. The *special* grant is descriptive of what has come to be known as categorical aids which zero in on a particular educational need as identified by the state legislature. The special or categorical subventions tend to limit local administrative prerogative in their use.

The broad classifications of *general* and *special* are then further broken down into *flat* and *equalizing* subcategories. The designation of a fund as a *flat* grant means that it is distributed uniformily on a per pupil or some other unit basis and goes to all districts alike regardless of local school district wealth. The *equalizing* subvention is one which takes local fiscal ability into consideration and theoretically allows greater state funds based on the relative wealth of local school districts. Table 2-1, showing the total of all state school funds, uses this classification technique.

A span of twenty years between 1949-50 and 1968-69 is given in this Table indicating the trends in method of distribution between general and special funds and equalizing and flat distributions. From Table 2-1, one can observe the steady progression toward greater use of equalization programs. In 1949-50, only 44.9 percent of the total dollars were distributed through equalizing formulas, while in 1968-69, 77.5 percent of the funds were distributed on a basis which took the fiscal ability of the school district into account. Accompanying this trend is a tendency for states to allocate resources through the larger general or basic state aid formulas. A certain amount of ebb and flow is apparent in shifts between general and special aid formulas, which indicates a tendency for states to enact one large basic state aid formula and then over a period of years to allow the large basic program to fragment into several smaller special purpose grants. The national totals given in the Table can be greatly influenced by changes taking place in very large states. For example, a partial explanation for the increase in special aid fund allocations between 1962-63 and 1968-69 can be attributed to California which had nine special aid programs in 1962-63 totalling $131,290,957 or 16.84 percent of the total funds distributed in California, while in 1968-69 this total had increased $414,685,613 and the percentage to 19.5.

Another method used by the U. S. Office of Education to analyze state school funds is a twelve-part typology[1] which provides a more detailed breakdown of method of distribution. Here, funds are analyzed in terms of variation in allotments based on unit weighting or some other need designation, equalization of fiscal capacity, purpose or use of grants, and extent of district participation. This rather complicated classification can be reduced to four descriptive elements, as follows:

TABLE 2-1

ESTIMATED AMOUNT AND PERCENT OF STATE GRANTS DISTRIBUTED BY STATE EDUCATION AGENCIES FOR PUBLIC SCHOOL PURPOSES, BY METHOD OF DISTRIBUTION 1949-50, 1957-58, 1962-63 AND 1968-69

	Amount in Millions							
	1949–50[a]		*1957–58*[b]		*1962–63*[c]		*1968–69*	
Distribution	*Amount*	*Percent*	*Amount*	*Percent*	*Amount*	*Percent*	*Amount*	*Percent*
Total Distributions	$ 1,998	100.0	$ 4,480	100.0	$ 6,539	100.0	$12,620	100.0
Flat	1,101	55.1	1,855	41.4	2,506	38.3	2,843	22.5
Equalizing	897	44.9	2,625	58.6	4,033	61.7	9,777	77.5
General Purpose	1,535	76.9	3,687	82.3	5,806	88.8	10,793	85.5
Flat	749	37.5	1,361	30.4	2,027	31.0	1,760	13.9
Equalizing	786	39.4	2,326	51.9	3,779	57.8	9,033	71.6
Special Purpose	463	23.1	793	17.7	733	11.2	1,827	14.5
Flat	352	17.6	494	11.0	479	7.3	1,082	8.6
Equalizing	111	5.5	299	6.7	254	3.9	745	5.9

Sources:

[a] Edgar L. Morphet and Erick L. Lindman, *Public School Finance Programs of the Forty-Eight States*, Federal Security Agency, Office of Education, Circular No. 274, U. S. Government Printing Office, Washington, D. C., 1950, pp. 75–77.

[b] Albert R. Munse and Eugene P. McLoone, *Public School Finance Programs of the United States, 1957–58*, Office of Education, U. S. Government Printing Office, Washington, D. C., 1960, p. 34.

[c] Albert R. Munse, *State Programs for Public School Support*, Office of Education, U. S. Government Printing Office, Washington, D. C., 1965, p. 112. (Amounts given do not include about $120 million in Tennessee which were predominately general purpose equalizing grants.)

(1) *General* and *special purpose*—*General* denotes funds used for non-restrictive general operation while *special* identifies funds of a restricted or categorical nature.

(2) *Variable equalizing*—The fund allocation is adjusted for both educational need variations of children and the fiscal capacity of the local school district. *Nonequalizing* simply means the fiscal capacity of the school district is ignored by the formula.

(3) *Fixed*—Funds are allocated on a standard amount per unit with no modification for local fiscal capacity or educational need differentials.

(4) *Universal* and *limited*—Funds distributed to all districts are *universal,* while funds distributed to only selected districts are classified as *limited.*

Using this typology of state school funds, the year of 1962-63 is contrasted with 1968-69 in Table 2-2. This Table indicates that *variable equalizing* funds have increased substantially over this short period of years in every category except the *limited, special purpose* category. *Limited, special purpose* represented a minute part of the whole in 1962-63 and constituted an even smaller percentage in 1968-69. Table 2-2 supports the conclusion that legislatures are tending to place more emphasis on equalization through the use of adjusted units of educational need and local fiscal ability measures. In keeping with the trend shown in Table 2-1, the *universal, special purpose* category is shown in Table 2-2 to have increased rather significantly during the short period from 1962-63 to 1968-69.

Probably the most noticeable feature of both tables is the total increase in state funds from a little over $6.5 billion in 1962-63 to over $12.6 billion in 1968-69. This reflects a trend by states to increasingly rely on taxes collected at the state level to provide support for the rising costs of education.

NATIONAL EDUCATIONAL FINANCE PROJECT CLASSIFICATION

Although the two techniques described above are quite useful in most circumstances, they each have the inherent limitation of assuming that equalization exists when, in fact, the net effect of the fund may be to provide little or no equalization. State funds having extensive equalizing qualities are classified the same as

TABLE 2-2

ESTIMATED AMOUNT AND PERCENT OF STATE DISTRIBUTIONS BY METHOD OF DISTRIBUTION USING MUNSE'S CLASSIFICATION

	Estimated Amount of Distribution (Millions)[a] *1962–63*		*Estimated Amount of Distribution (Millions) 1968–69*	
Classification	*Amount*	*Percent*	*Amount*	*Percent*
Total	$ 6,539	100.0	$12,620	100.0
Fixed	2,190	33.5	3,648	28.9
Variable Equalizing	4,034	61.7	8,420	66.8
Variable Non-Equalizing	316	4.8	538	4.3
Universal, General Purpose	5,806	88.8	10,498	83.2
Fixed	2,007	30.7	2,327	18.5
Variable Equalizing	3,779	57.8	8,093	64.2
Variable Non-Equalizing	20	0.3	64	0.5
Universal, Special Purpose	143	2.2	1,860	14.8
Fixed	112	1.7	1,222	9.7
Variable Equalizing	29	0.4	225	1.8
Variable Non-Equalizing	1	—	412	3.3
Limited, General Purpose	88	1.3	136	1.1
Fixed	8	0.1	24	0.2
Variable Equalizing	69	1.1	72	0.6
Variable Non-Equalizing	11	0.2	41	0.3
Limited, Special Purpose	502	7.7	126	1.0
Fixed	63	1.0	75	0.6
Variable Equalizing	156	2.4	30	0.2
Variable Non-Equalizing	283	4.3	21	0.1

[a] Albert Munse, *op cit.*, 1965, p. 46.

state funds possessing only moderate or very weak equalization. Both of these classification methods also separate flat or fixed grants from equalizing grants and, therefore, do not give credit for the equalizing qualities which can be derived from providing a given unit amount to rich and poor alike. Such a situation is illustrated by North Carolina, where a high percentage of all school monies are derived from state level taxation and redistributed back to local school districts without taking local fiscal ability into account. The two previously discussed classification schemes identify North Carolina's funds as non-equalizing, however, the actual impact of this state's funds provides for substantial equalization, since over 70 percent of all the funds are derived from state resources.

In order to avoid misinterpretations of the intent and impact of state school finance funds, the National Educational Finance Project has analyzed all state school funds using three different techniques. First, in this chapter all state funds are classified as to their method and purpose. This classification does not attempt to measure or even identify equalizing features. The second approach is presented in Chapter 3 where Briley provides a revenue profile for school districts in each state showing the impact of local, state, and federal revenues on school districts with 1,500 or more pupils. The third view is provided by Johns and Salmon in Chapter 4 where they concentrate entirely on the equalization aspects of all state and local funds for education. Their technique measures the extent of equalization derived from finance formula manipulations in each of the states and gives an equalization rating for each state. The first of these classifications, funds by method and purpose, is given below.

Method

The classification of funds by method, as used here, has five categories, they are: circumscribed, uniform, fiscal-modified, client-modified, and fiscal-client-modified. None of the categories reflect equalizing tendencies. Each category is simply descriptive of the type of formula manipulation utilized by the legislature. For example, fiscal-modified indicates that the legislature makes adjustments in the formula for the fiscal ability of the school district; however, there is no attempt to show the degree of correlation with wealth or whether the fund, in fact, fiscally equalizes or disequalizes. Descriptions of the above categories follow.

Type I, Circumscribed. Many states have funds which are allocated on the basis of (a) circumstance of the local school districts, (b) special conditions or imposed restrictions, and (c) discretion or judgment of administrators. This type of fund is limited to certain school districts and, therefore, cannot be considered in the same light as funds with universal distributions.[2] Distributions with formulas based on geography or political organization, such as unorganized territories in Maine, are classified as *circumscribed.* Special legislation which imposes conditions, such as funds to cities with over 100,000 population, are classified as *circumscribed* because of their limited application.

Also included in this category are funds distributed at the discretion of the chief state school officer or other state official. These funds include those allocated to districts for reasons of emergency. (See Column I, Table 2-3.)

Type II, Uniform. Funds distributed on the basis of a given amount per unit (per teacher, per pupil in average daily attendance, per pupil in average daily membership, per pupil enrolled, etc.) are all described as *uniform*. (See Column II, Table 2-3.)

Type III, Fiscal-Modified. If a distribution formula takes the fiscal capacity or wealth of the school district into account then it is designated as having fiscal modification. Fiscal modification can be based on any one of several wealth measures including assessed valuation of property, equalized valuation of property, income or indexes of ability. (See Column III, Table 2-3.)

Type IV, Client-Modified. With the advent of the foundation program concept, the notion that state aid programs should be designed to meet variations in educational needs of children became commonplace. Funds were no longer distributed totally on a uniform per unit allocation. Several states weight pupils based on high cost education programs. Districts containing pupils with mental, physical, social, economic and other handicaps are allowed proportionally more money since it costs more to bring handicapped children to a functional education level. Such provisions in state aid programs are classified as *client-modified*. Sometimes such modifications include adult education courses and teacher training programs in addition to programs for children, hence the use of the term "client" modified instead of "pupil" or "child" modified. (See Column IV, Table 2-3.)

Type V, Fiscal-Client-Modified. Where state programs contain weighting adjustments for both educational needs of the clientele and fiscal ability of school districts, the category is called *fiscal-client-modified*. As will be observed, most *basic* state aid formulas fall within this category. (See Column V, Table 2-3.)

Purpose

State school funds are allocated for a great number of purposes, ranging from general unrestricted aid for current operation to very specific categorical aids such as driver education. It is not always possible to identify all programs financed by a state since in many instances specific educational programs are required by and subsumed in the basic state aid formula. No attempt is made here to ferret out the program benefits of each of the large basic funds; for this reason one should not assume that a state is not providing money for, say, culturally deprived children simply because there is no categorical aid for that specific purpose.

The classification design presented here categorizes all funds for general, nonrestricted elementary and secondary use as *basic multi-program.* Foundation programs, or other large "equalization" aid funds are types of subventions which are classified in the *basic multi-program* category.

Special categorical grants which have separate legislative appropriations are classified as *specific educational programs* according to purpose (early childhood education, compensatory education for culturally deprived, exceptional or handicapped education including programs for gifted, vocational education, adult and continuing education and junior-community college education). It should be emphasized that all the state aid funds considered here are distributed through the state education agency or state department of education in charge of administering the public or common school program. Funds are not included if they are channeled through other state agencies such as separate junior college or vocational education boards or departments.

In addition to the broad programmatic areas listed above, funds for transportation, school housing, textbooks and the like, are classified as *support programs* and listed separately.

OBSERVATIONS ON METHOD AND PURPOSE

Nearly one-half (48.84 percent) of the total $12.6 billion dollars distributed by states in 1968-69 was allocated through formulas which provided adjustments for both the clientele and the fiscal condition of the school district (Table 2-3). Adjustments for clientele (generally pupils) were usually made by weightings for average daily attendance or average daily membership. These weightings were expressed both in terms of pupil units and classroom units. Occasionally, adjustments were made in terms of reimbursement expenditures for the previous year. Allocation formulas with only fiscal modifications were found in $2.36 billion or 18.67 percent of all funds distributed by states (Table 2-3). Where funds were fiscally modified, the states distributed the funds on a standard unit, adjusted for the

TABLE 2-3

CLASSIFICATION OF STATE AID FUNDS BY METHOD OF DISTRIBUTION, 1968-69
(Millions of Dollars)

State	I (Circumscribed)	II (Uniform)	III (Fiscal-Modified)	IV (Client-Modified)	V (Fiscal-Client-Modified)	Total
Alabama	$	$ 21.47	$	$	$ 166.11	$ 187.58
Alaska		22.08	26.00	.23		48.31
Arizona		73.05	12.00		66.00	151.05
Arkansas	1.03	86.59	7.10			94.72
California	24.53	712.61	492.64	109.40		1,339.18
Colorado	.46	41.65	49.87			91.98
Connecticut	.30	127.54		4.50		132.34
Delaware		13.56		63.41		76.97
Florida		83.12			577.75	668.56
Georgia		36.08			291.77	327.85
Hawaii						**
Idaho	0.10				32.86	32.96
Illinois	9.56	37.01	263.81	117.15		427.53
Indiana	0.01	51.20	28.87	5.03	179.85	264.96
Iowa	4.80	52.43		3.50	111.00	171.73
Kansas		5.09	98.40	2.31		105.80
Kentucky		2.60			182.61	185.21
Louisiana	0.31	29.82		1.69	262.53	294.35
Maine	0.89	0.83	40.65	0.65		43.02
Maryland		45.74	192.40			238.14
Massachusetts	1.13	3.69	23.70	24.70	106.04	159.26
Michigan	2.00	3.25	579.76	30.00		615.01
Minnesota	3.13	57.07	0.20		198.59	258.99
Mississippi		28.33			129.30	157.63
Missouri	1.06	185.38	33.02			219.46
Montana		11.26		0.02	23.00	34.28
Nebraska		5.92		1.10	25.00	32.02
Nevada					29.15	29.15

New Hampshire	2.75	1.88		0.45	4.28	9.36
New Jersey	5.31	121.14	95.26			221.71
New Mexico	0.30	22.57	20.00	72.92		115.79
New York	62.00	39.90	41.00		1,817.70	1,960.60
North Carolina		20.94		346.85		367.79
North Dakota		2.87		0.45	22.08	25.40
Ohio	0.28	30.72	33.29	0.30	404.02	468.61
Oklahoma		37.30	54.20			91.50
Oregon	0.62	40.20		57.11		97.93
Pennsylvania	3.40	71.19	32.55	83.68	598.57	789.39
Rhode Island		3.00	39.30			42.30
South Carolina	17.99	34.41		117.02		169.42
South Dakota		2.41			9.13	11.54
Tennessee	3.43	16.15	174.14			193.72
Texas		277.58			365.53	643.11
Utah	0.18	7.04	5.10	0.24	75.72	88.28
Vermont		7.51			32.99	40.50
Virginia	0.23	98.80		187.28		286.31
Washington		40.01	13.00		251.50	304.51
West Virginia		49.47		11.07	53.01	113.55
Wisconsin		23.56		16.11	130.31	169.98
Wyoming		3.55			17.13	20.68
Total	$ 153.49 (1.22%)	$ 2,689.57 (21.31%)	$ 2,356.26 (18.67%)	$ 1,257.17 (9.96%)	$ 6,163.53 (48.84%)	$12,620.02 (100.00%)

**State Budget

fiscal ability or inability of school districts. In these programs, the relative needs of children are not taken into account. On the other hand, $1.26 billion, or 9.96 percent, of all funds were distributed on a *client-modified* basis (Table 2-3). Here, no attention was given to the fiscal condition of the school district, and the entire amount was allocated on some basis of legislatively perceived educational need of the clientele.

Uniform or flat grants constituted $2.69 billion (21.31 percent) of all state funds distributed (Table 2-3). As pointed out above, *uniform* distribution provides for no fiscal modification and no educational need or clientele adjustments other than a standard unit designation. With this type of distribution, the wealthy school district receives the same amount of funds per unit as the poor district and no compensation is given for students with high cost educational needs.

The smallest proportion of the funds was distributed through *circumscribed* grants. *Circumscribed* funds accounted for about $153 million or 1.22 percent of the total (Table 2-3). The major portion of the *circumscribed* funds are found in New York where over 50 million dollars are distributed for the aid of the urban education, and in California where *circumscribed* funds are appropriated for compensatory education, special education therapists, local emergency assistance, and grants to teachers for educational advancement.

Regarding purposes of distributions, over $10 billion or 85.53 percent of the total state funds were distributed through basic multi-purpose programs (Table 2-4). These large grants, of course, encompass current operation and sometimes capital outlay and, in many cases have, as in Florida, special unit allotments for exceptional children, kindergarten, vocational and adult education. The funds for these special programs are distributed to the local school district in a lump sum, and no special earmarking or accounting is generally required except that the local school district must staff and provide facilities for the designated program.

Thirty-five of the states have special funds for exceptional and handicapped children and several of the other 15 states, such as Kentucky, New York, and Georgia, have program provisions in their basic state aid formulas (Table 2-4). The largest amount of funds for exceptional and handicapped children is funded by categorical grants in California where over $125 million is provided for such purposes. Pennsylvania, Illinois, Michigan and Washington all make very large categorical grants for exceptional and handicapped children.

The emergence of state grants for compensatory education programs for culturally deprived children is a comparatively recent phenomenon, gaining its impetus from the federal Elementary and Secondary Education Act of 1965. At least thirteen states make special provisions for programs which can be interpreted as being designed to assist culturally deprived children. One fund in New York accounts for $52 million of the total $88.73 million categorized for this purpose.*

Vocational education programs are distributed through separate special funds in 36 states (Table 2-4). Once again, as in the case of exceptional and handicapped children, several states include allocations for vocational education in their basic general aid formula. These special funds account for $131.4 million of the vocational educational funds in the United States.

It is quite common for states to allocate funds separately for support programs such as transportation, school housing, driver education and textbooks. Special support grants for transportation were $290.80 million. During the one year of 1968-69, special support grants for school housing constituted $407.56 million dollars. Textbooks claim $121.37 million of the support funds while driver education programs, categorically funded in 23 states, amount to $42.87 million. A detailed breakdown of support programs is found in Table 2-5.

SUMMARY

The classification offered here leaves open the question of equalization (to be treated in later chapters), and considers state aid funds only as to the method of distribution. It is not intended in this presentation that the implication be made that funds classified as *fiscal* or *client-modified* are so modified in the same degree—merely that funds so classified do contain evidence of these considerations.

The apparent trend toward equalizing-type distribution methods, indicated by previous studies, is not denied in this study—in fact, the preponderance of fiscal-client-modified monies for basic multi-program use tends to confirm the trend.

---

* Chapter 9 of this book shows that the basic state aid formulas in several states tend to focus on low achievement school districts.

TABLE 2-4

CLASSIFICATION OF STATE AID FUNDS BY PURPOSE FOR
BASIC MULTI-PROGRAM AND SPECIFIC EDUCATIONAL PROGRAMS, 1968-69
(Millions of Dollars)

	Basic Multi-Program	*Specific Educational Programs*					
State		*Early Childhood*	*Compensatory Education*	*Special or Exceptional Education*	*Vocational Education*	*Adult and Continuing Education*	*Junior (or Community) College*
Alabama	$ 178.11	$	$ 0.10	$ 0.31	$ 7.49	$	$
Alaska	41.67*				1.61		
Arizona	147.76			1.34	1.95		
Arkansas	84.00			0.40	1.03	0.08	
California	1,032.75*	4.11	11.05	125.64	1.03	9.36	91.85
Colorado	82.60*		0.17	4.00			
Connecticut	97.67*		6.18	4.50	1.10	0.25	
Delaware	63.41						
Florida	497.75*			4.03	1.20		90.25
Georgia	291.77				7.28		
Hawaii							
Idaho	32.86				0.10		
Illinois	365.65*			23.77	8.96	3.28	
Indiana	194.66*		3.28	4.18	1.20	0.86	
Iowa	149.58*			3.50	12.00		
Kansas	100.10*			2.31	0.38		2.33
Kentucky	182.61						
Louisiana	270.03*			1.69	1.23	0.51	
Maine	35.54*			0.66	0.70	0.09	
Maryland	141.90*			17.50		0.81	5.50
Massachusetts	106.04			11.37			
Michigan	579.76*		2.00	30.00			
Minnesota	220.19*			8.50	9.90		
Mississippi	143.26						
Missouri	169.75			8.45	5.41		7.31

Montana	32.49				0.45		
Nebraska	30.32*			1.10	0.06		
Nevada	29.15*						
New Hampshire	5.29*			0.52	0.05		
New Jersey	168.57*			8.44	2.63	0.34	
New Mexico	105.34						
New York	1,817.70*		52.00		1.60		
North Carolina	338.24			1.18	11.51		
North Dakota	24.76			0.45	0.21		
Ohio	404.30*		8.81	10.14	5.79	0.12	
Oklahoma	86.85			0.78	1.20		
Oregon	73.90		0.60	2.75	0.13		8.32
Pennsylvania	607.66*		0.03	44.05	13.40		8.88
Rhode Island	35.20*		2.00	1.00			
South Carolina	128.54			0.05	6.09	1.61	
South Dakota	11.54*						
Tennessee	174.80			1.20	3.43		
Texas	625.69						
Utah	78.06*		0.80		0.24		
Vermont	32.99			1.87	0.50		
Virginia	249.76		1.71	5.86	8.92	0.12	
Washington	251.50*			14.80	3.75	0.66	
West Virginia	110.60			0.57	1.46		
Wisconsin	139.53*						
Wyoming	20.68*			9.59	6.86		
Total	$10,792.90	$4.11	$88.73	$356.50	$131.14	$18.09	$214.44

*Includes State Aid for Kindergarten.

TABLE 2-5

CLASSIFICATION OF STATE AID FUNDS BY PURPOSE FOR SUPPORT PROGRAMS, 1968-69
(Millions of Dollars)

	Support Programs													
State	*Transportation*	*School Housing*	*Administration and Supervision*	*Textbooks*	*Emergencies and Contingencies*	*Orphans*	*Driver Education*	*Professional and Curriculum Improvement*	*School Lunch*	*District Organization*	*Libraries*	*Health Service*	*Other*	*Total All Programs Tables 2-4 and 2-5*
Alabama	$	$	$	$ 1.08	$	$	$ 0.19	$	$	$	$	$	$	$ 187.58
Alaska	2.94	1.62							0.23				0.24	48.31
Arizona														151.05
Arkansas	7.10		0.34	1.51		0.05					0.08		0.13	94.72
California	19.08			21.26		*	11.40						11.65	1,339.18
Colorado	4.75				0.30			0.16						91.98
Connecticut	5.43	16.00					1.04				0.17			132.34
Delaware	2.92	10.64												76.97
Florida		63.80		9.60			1.92							668.56
Georgia		28.80												327.85
Hawaii														**
Idaho														32.96
Illinois	14.57	1.90	2.54			1.11	5.75							427.53
Indiana	14.18	46.60												264.96
Iowa		4.75			0.05	0.15	1.70							171.73
Kansas							0.68							105.80
Kentucky				2.60										185.21
Louisiana		0.20		7.88			0.38		12.35				0.08	294.35
Maine		4.02	0.03				0.12			1.85			0.01	43.02
Maryland	21.20	50.50					0.73							238.14

Massachusetts	13.33	23.70				1.13			3.69					159.26
Michigan			3.25											615.01
Minnesota	19.00				0.70	0.20			0.50					258.99
Mississippi		6.66		2.53				5.18						157.63
Missouri	16.91	1.80		8.70		0.07		1.06						219.46
Montana	1.20					0.02	0.10							34.28
Nebraska							0.54							32.02
Nevada														29.15
New Hampshire		2.75	0.30							0.45				9.36
New Jersey	13.14	28.36			0.18								0.05	221.71
New Mexico	7.55			2.30	0.30		0.30							115.79
New York				25.29				10.00	13.01	41.00				1,960.60
North Carolina	2.84			8.61			5.12	0.29						367.79
North Dakota														25.40
Ohio	33.29						5.25	0.61					0.30	468.61
Oklahoma				2.67										91.50
Oregon	6.63	5.00					0.60							97.93
Pennsylvania	32.00	56.08	3.86		0.50	4.55	3.42			2.73		12.23		789.39
Rhode Island		4.10												42.30
South Carolina	10.56	18.01	0.20	3.50			0.30		0.36		0.20			169.42
South Dakota														11.54
Tennessee		10.38		3.91										193.72
Texas				17.42										643.11
Utah	2.20	4.24					0.50	0.07	1.67		0.50			88.28
Vermont		4.65					0.49							40.50
Virginia	8.75		2.85	2.21	0.15		0.94	1.88			1.15		2.01	286.31
Washington	18.50	13.00				2.30								304.51
West Virgina			0.06	0.30		0.03	0.13		0.40					113.55
Wisconsin														169.98
Wyoming	12.73						1.27							20.68
Total	$290.80	$407.56	$13.43	$121.37	$2.18	$9.61	$42.87	$19.25	$32.21	$46.03	$2.10	$12.23	$14.47	$12,620.02

*Negligible.
**State Budget.

TABLE 2-6

FUND CLASSIFICATION BY METHOD OF DISTRIBUTION AND PURPOSE, 1968-69

(Millions of Dollars and Percent)

Purpose	Method of Distribution											
	I Circumscribed		II Uniform		III Fiscal-Modified		IV Client-Modified		V Fiscal-Client-Modified		Total	
	$	%	$	%	$	%	$	%	$	%	$	%
Basic Multi-Program	26.46	17.24	1,733.88	64.47	2,048.23	86.92	951.44	75.69	6,032.89	97.89	10,792.90	85.53
Specific Educational Programs:												
Early Childhood	4.11	2.68									4.11	0.03
Compensatory	54.60	35.56	34.13	1.27							88.73	0.70
Special or Exceptional	9.65	6.29	96.34	3.58	8.45	0.36	206.06	16.39	36.00	0.58	356.50	2.82
Vocational	6.18	4.03	111.32	4.14	*		13.64	1.08			131.14	1.04
Adult and Continuing	3.30	2.15	11.43	0.42	2.50	0.11	0.86	0.07			18.09	0.14
Junior College			106.31	3.95	43.25	1.84			64.88	1.05	214.44	1.70
Support Programs:												
Transportation	3.70	2.41	187.20	6.96	86.57	3.67	13.33	1.06			290.80	2.30
School Housing	28.04	18.27	176.10	6.55	123.66	5.25	50.00	3.98	29.76	0.48	407.56	3.23
Administration and Supervision	0.03	0.02	13.40	0.50							13.43	0.11
Textbooks			112.76	4.19			8.16	0.68			121.37	0.96
Emergency and Contingency	2.18	1.42									2.18	0.02
Orphans	1.13	0.74	7.71	0.29	0.75	0.03	0.02				9.61	0.08
Driver Education			42.87	1.59							42.87	0.34
Professional and Curriculum Improvement	11.30	7.36	7.95	0.30							19.25	0.15
School Lunch			31.98	1.19			0.23	0.02			32.21	0.26
District Organization	2.73	1.78			42.85	1.82	0.45	0.04			46.03	0.36
Libraries			2.10	0.08							2.10	0.02
Health Services							12.23	0.97			12.23	0.10
Other	0.08	0.05	14.09	0.52			0.30	0.02			14.47	0.11
Total	153.49	100.00	2,689.57	100.00	2,356.26	100.00	1,257.17	100.00	6,163.53	100.00	12,620.02	100.00

If all funds with fiscal modifications are summed, one finds that over 67 percent of all state dollars are distributed, to some degree, with fiscal capacity or wealth of local school districts taken into account.

Similarly, client modifications are found in over 58 percent of the funds. Contrasting client-modified funds with those with fiscal adjustments, it might be said that legislatures give greater attention to variations in fiscal ability of school districts than to variations in the needs of the client population. However, such a conclusion would ignore the fact that economic inadequacies of school districts are, in most cases, symptomatic of educational and cultural deficiencies of the population.

Table 2-6 is a summary of all state aid funds by method of distribution and by purpose, showing dollars and the percentage (within each method) allotted for various purposes. This represents the national picture which has been displayed, by state, in Tables 2-3, 2-4 and 2-5.[3]

FOOTNOTES

1. Albert R. Munse, *State Programs for Public School Support*, Office of Education, U. S. Government Printing Office, Washington, D.C., 1965.

2. *Ibid.*, p. 112.

3. Basic information for these tables was obtained from: Thomas L. Johns, *Public School Finance Programs*, 1968-69, U. S. Government Printing Office, Washington, 1969.

CHAPTER 3

Variation Between School District Revenue and Financial Ability

WILLIAM P. BRILEY

The extreme degree of variation of financial resources among school systems has long been a problem confronting educators in the United States. From 1905, when Cubberly[1] documented the plight of small schools in New England, to 1970, investigators have demonstrated that financial resource variation continues to exist among school districts in different states, in the same state, or even within a local area.

REVENUE VARIATION AND EDUCATIONAL OPPORTUNITY

Although the fact is well known that school districts do receive varying amounts of revenue, there is no substantial consensus as to the effects this variation has on educational opportunity. For example, in the report coordinated by Coleman[2] reference was made to the non-relatedness of pupil expenditure and pupil achievement. This finding prompted some to conclude that variation in financial resources had little bearing on educational opportunity or educational output. However, it was also pointed out in the report that pupil achievement was directly related to teacher characteristics of educational level and experience. Adequate salary schedules should reflect these characteristics. In fact, it would be difficult to find any school system in the United States which does not, to some degree, include level of training and experience as factors in determining the amount of teacher salary. Given that instructional salaries are usually the largest school expenditure item, it is difficult to accept a conclusion that financial resource variation has little relationship to educational opportunity.

Many factors other than teacher characteristics affect school output. Such factors include cultural level of the parents, socioeconomic level of the home, physical and mental handicaps of pupils, instructional supplies and materials and the appropriateness of the training, experience and skills of the teachers. The question is not one of inherent financial resource uselessness. Rather, the question is the amount of financial resources and how to effectively utilize financial resources in optimizing school output.

Assuming that efficient and reasonable allocation systems existed, it would be necessary to provide unequal amounts of revenue per pupil to maintain equality of educational opportunity among students differing in educational need. A physically or emotionally handicapped child requires resources beyond those of a normal child to achieve any degree of equality. School systems, however, not only differ with respect to student need; the systems also differ in factors external to the educational programs. The cost to provide identical programs for identical students could vary in different sections of the country. A relatively inaccessible location could require higher building costs, may involve an extensive school transportation system, and could result in higher levels of personnel salaries. Large urban districts may also have higher living costs and higher building costs.

SOME PREVIOUS STUDIES OF REVENUE VARIATION AND FINANCIAL ABILITY

School districts within each state vary widely in equalized valuation of property per pupil. Approximately 52 percent[3] of all school revenue is obtained from local sources and from 97 to 98 percent of local tax revenue is derived from property taxes. Therefore, it is not surprising that numerous researchers have found that expenditure per pupil in many states are highly correlated with property valuation per pupil. Available research indicates that variations in expenditure or revenue per pupil are more nearly related to differences in the per pupil wealth of school districts than necessary variation in costs per pupil resulting from differences in educational need.

Stephen J. Weiss,[4] recently evaluated 1,384 communities in the states of Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont. The author employed the ability measure of property valuation within each state at a fixed ratio to full market value. Since this ratio was different for the various states, the data were not comparable on an interstate basis. While acknowledging the inherent weaknesses of property valuation as the only financial ability measure, Weiss defended his selection as follows: "... on purely practical grounds, in the present situation property is the tax base accessible to school boards who must raise funds locally." Current expense per pupil was the measure employed to indicate the quality of a school program. Simple correlations between financial ability and current expenditure per resident pupil were significant for every state Weiss studied. He concluded that the evidence obtained supported the contention that property valuation is the most important single factor affecting expenditures for education.

James and others[5] have examined the relationship between ability and expenditure for local school districts in Nebraska, New Hampshire, Massachusetts, Wisconsin, New Jersey, Oregon, California, New York, New Mexico, and Washington. The study involved an analysis of 772 selected school districts having a minimum size of 1,500 pupils and an instructional program encompassing grade levels one through twelve.

Ability measures, conceptualized in terms of a general tax base, initially involved real property, personal income, and retail sales. Due to the lack of data available at the district level, however, the ability measures were reduced to estimates of equalized property valuation and median family income. The expenditure data were determined from current expense receipts. Results of this study indicated that both property valuation and median family income were directly related to current expense.

Research has not only indicated that local financial ability was functionally related to expenditure, it has also indicated the range of the relationship. In the previously cited study by

5

Weiss the difference in financial ability per pupil between districts at the 90th and 10th percentiles in each state were as follows: Maine ($22,000), Massachusetts ($29,700), Vermont ($41,400), New Hampshire ($42,500), Rhode Island ($19,400), and Connecticut ($27,500). The relative ability ratios in each state extend from a low of 1.8 to 1 for Rhode Island to a high of 7 to 1 for Maine. It should be noted that these figures did not constitute the extreme points of each state, which Weiss omitted.

Earlier studies in other states did not omit the extreme variation in financial ability. Fitzwater[6] in an evaluation of school district reorganization programs in thirteen states noted that wide variations in financial ability existed in most states. In particular, he related the following extreme cases:

1. In California, one district had $1,000,000 in assessed valuation per pupil while another district had only $110 per pupil, a comparison in ability of 10,000 to 1.
2. In Washington, the comparison in ability was 500 to 1.
3. In Illinois, within one county, the differences in financial ability were 150 to 1.

The American Association of School Administrators[7] has also documented the normal and extreme variations of financial ability. They have determined that "... it is not uncommon for the richest district within a county to have 20 to 50 times as much wealth per pupil as the poorest. ..." Moreover, the association related the case of two adjoining districts in Polk County, Iowa. One district had an assessed valuation per pupil of $216,271 while the other had $1,668 per pupil.

Although local government usually has provided most public school revenue, state governments have accounted for an estimated 40.7 percent of public school revenue for 1968-1969. Most states have attempted to reduce the disparities resulting from differential local financial ability by developing equalization financing in the form of a foundation or other minimum educational level programs. However, as Weiss has noted in the New England states:

> "Regardless of the allocation pattern of state aid per pupil in relation to local wealth in the different states, expenditure levels are still primarily related to local ability to raise revenues."

In Missouri the situation appeared to be similar in 1967-68. This recent study of public schools in Missouri, by Morphet and Johns,[8] indicated that the basic state finance program "... guarantees more funds per pupil for the more wealthy than for the less wealthy districts. . . ." Moreover, excluding non-mandated local contributions, the total state and required local district allocation favored the most able district, Clayton, over the least able district, Fox, by a factor of 2.5 to 1.

THE NATIONAL EDUCATIONAL FINANCE PROJECT STUDY OF VARIATION BETWEEN LOCAL DISTRICT REVENUE AND FINANCIAL ABILITY[9]

Although the studies reported above have indicated that local districts vary widely in financial ability and that the amount of financial resources available per pupil is associated with financial ability, the research has not explored three important areas. First, the investigations have typically been limited to a selected number of states within the country; second, measures of financial ability have been considered regardless of whether they are legally accessible at the local district level of government; and finally, the research has usually been confined to expenditures rather than sources of revenue.

To deal adequately with these areas, a national study was undertaken in 1969 to examine the relationship between the amount of revenue available to local school districts from federal, state and local sources and the financial ability of those districts. All states were considered except for the state of Hawaii which has no local school districts.

Uniform measures of the relative taxpaying ability of local school districts are not available for all states. Approximately 97 to 98 percent of local school tax revenue is derived from property taxes. Therefore, the equalized value of property is the best single measure of local paying ability. Local taxpaying ability for schools is really not "taxpaying ability" but rather the accessibility the board of education has to property tax revenue. In this study, equalized valuation of property was used as the measure of local taxpaying ability if that measure was available. If a state used an index of taxpaying ability to estimate the equalized value of property, that measure was used. If neither of these measures were available, the assessed valuation of property per pupil was used as the measure of the relative ability of local school districts. Assessed valuation of property per pupil is not as good a measure of local ability to pay property taxes as equalized valuation. However, assessed valuation of property per pupil is a measure of the relative "accessibility" of boards of education to property tax revenue.

Local districts initially considered in the study were those which had a minimum size of 1,500 pupils in average daily attendance,[10] and an instructional program encompassing grades one through twelve.[11] The restriction on district size excluded the extreme effects of small and inefficient public school operational units, and the comprehensive school district provided a more comparable basis for analysis. Financial ability and pupil data were obtained for approximately 4,800 of these districts through each state department of education.

Within each state all of the districts with an average daily attendance of 1,500 or more which provided schools for at least grades 1-12, were ranked in terms of the financial ability per pupil recognized by that state. The two largest districts within each state were initially selected. An additional fifteen districts were selected from each state on an equal interval basis so that the selected districts would approximate the total district financial ability distribution.[12] For all selected districts additional data were obtained in terms of the state plans of educational finance and each district's revenue receipts for fiscal year 1968-1969. Revenue data for the selected districts in each state were categorized in terms of local revenue, state revenue for the basic state program, state special purpose of categorical revenue, federal revenue, and total revenue.[13]

Data for the selected districts were examined in terms of two questions. First, does a relationship seem to exist between financial ability and different sources of revenue per pupil within each of the states? Second, what is the significance or importance of the relationship? If the most able district received $2,000 per child and the poorest district received only $200 per child, the relationship is very important. However, if the wealthiest district received $1,000 per child and the least able district received $990 per child, the effects of the relationship are probably inconsequential.

The answer to the first question was sought by comparing the financial ability distribution of the selected districts with the revenue per pupil received by those districts from different revenue sources.[14] Pearson Product Moment correlation coefficients provided the basis for this comparison. Answers to the second question were derived from an examination of the variation in the amounts of revenue available per pupil in average daily attendance in the selected districts of a state. It would, of course, have been better procedure to make these comparisons in terms of weighted pupils which would reflect necessary differences in the per pupil cost of education. Unfortunately, weighted pupil measures were available in only a few states and even in those states they were probably inadequate. However, it is believed that the use of average daily attendance instead of weighted pupils did not seriously affect the conclusions drawn from the study.

Results of the analyses are presented in two forms, graphical and tabular.

Figure 1 presents a graph profile of a hypothetical state. Selected school districts are arranged, from top to bottom, in descending order of financial ability per child. Along the horizontal axis, revenue per child is portrayed in terms of the required local revenue for the basic state program, the state revenue for the basic state program, the special purpose categorical revenue, the local revenue not required for the basic state program, and the federal revenue. Figures 2-50, grouped in alphabetical order, are appended to provide some visual indication of the relationships between financial ability and revenue per pupil. The graph profiles offer a major advantage in that they provide an integrated general interpretation of the relatedness and significance of financial ability and revenue per pupil from different sources.

To amplify this one form of evaluation, two tables are provided which immediately follow the graph profiles. Table 3-1 presents the correlations between different sources of revenue and financial ability for the sample districts in each state, and also the ratios between the highest and lowest district in each state in terms of ability and total revenue per pupil. Table 3-2 indicates the percentages of total revenue per pupil contained in each revenue category.

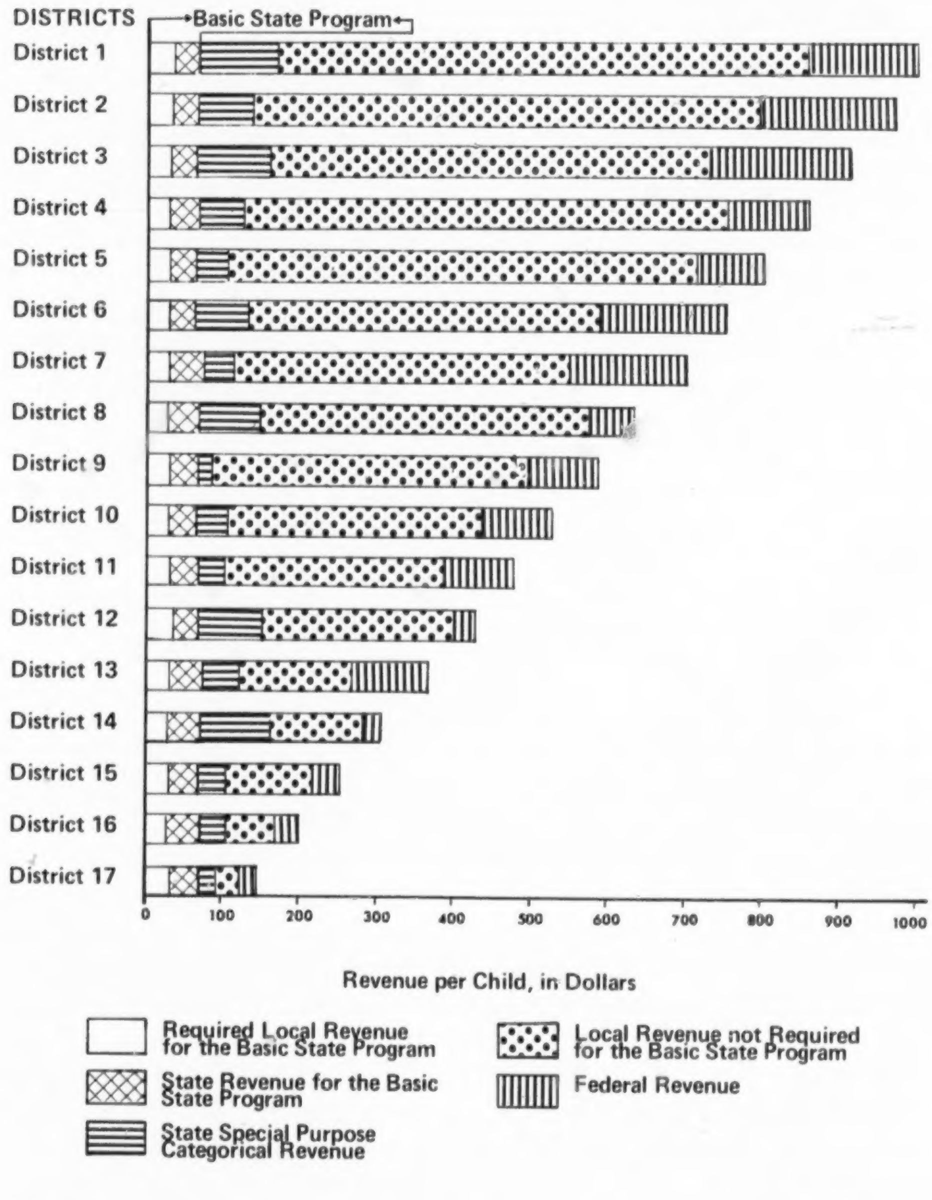


FIGURE 1. An Example of a Bar Graph for Representing Revenues Available to Selected School Districts

Analysis of Profiles

The profiles reveal some interesting consequences of the manipulation of alternative finance models. For example, more

TABLE 3-1

ANALYSIS OF FINANCIAL ABILITY[a] AND REVENUE RECEIPTS[b] FOR SELECTED SCHOOL DISTRICTS WITHIN EACH STATE

			Correlations Between Sources of Revenue Per Pupil and Local Financial Ability[e]			
State	*Financial Ability Ratio*[c]	*Total Revenue Per Pupil Ratio*[d]	*Local Revenue*	*Basic State Revenue*	*State Categorical Revenue*[f]	*Federal Revenue*
Col. 1	*Col. 2*	*Col. 3*	*Col. 4*	*Col. 5*	*Col. 6*	*Col. 7*
Alabama	3.79	1.60	0.31	−0.07	−0.23	−0.20
Alaska	2.51	1.96	0.15	0.03	−0.42	−0.58
Arizona	7.41	1.38	0.51*	−0.67**	0.01	−0.14
Arkansas	10.98	1.68	0.94**	−0.47	0.55*	−0.52*
California	23.76	1.95	0.94**	−0.72**	−0.23	−0.38
Colorado	2.50	1.84	0.69**	−0.96**	0.62**	−0.18
Connecticut	5.69	1.98	0.64**	−0.50*	0.35	−0.01
Delaware	6.39	2.26	0.84**	0.40	0.09	−0.23
Florida	3.18	1.50	0.89**	−0.74**	−0.32	−0.43
Georgia	4.65	1.69	0.79**	−0.83**	−0.55*	−0.13
Idaho	2.70	1.67	0.89**	−0.70**	−0.04	−0.39
Illinois	20.06	2.10	0.62**	−0.87**	0.14	−0.29
Indiana	17.17	3.84	0.95**	−0.92**	0.50*	0.48*
Iowa	7.07	1.80	0.89**	−0.36	−0.32	−0.18
Kansas	3.75	2.01	0.80**	−0.32	0.07	−0.50*
Kentucky	8.60	1.47	0.89**	−0.78**	0.07	−0.74**
Louisiana	52.70	2.46	0.94**	−0.90**	−0.12	−0.30
Maine	11.16	2.41	0.70**	−0.52*	−0.07	−0.56*
Maryland	2.74	1.50	0.92**	−0.83**	−0.21	−0.51*
Massachusetts	10.35	2.20	0.87**	−0.42	0.59*	−0.25
Michigan	30.04	2.27	0.85**	−0.94**	0.17	0.13
Minnesota	7.40	1.51	0.84**	−0.97**	−0.34	0.21
Mississippi	5.81	1.63	0.45	−0.54*	0.88**	−0.25
Missouri	25.12	3.90	0.98**	−0.51*	−0.19	−0.45*
Montana	3.07	2.13	0.74**	−0.66**	0.14	−0.23
Nebraska	5.18	1.24	0.67**	−0.22	0.27	−0.50*
Nevada	2.72	1.31	0.96**	−0.91**	−0.18	−0.66**
New Hampshire	4.49	1.85	0.37	−0.51*	−0.34	0.21
New Jersey	10.49	1.66	0.19	−0.45	−0.37	−0.21
New Mexico	14.26	1.62	0.65**	0.22	0.12	0.04
New York	10.55	1.62	0.86**	[illegible]	−0.36	−0.09
North Carolina	3.60	1.54	0.47	[illegible]	−0.48	−0.74**
North Dakota	2.15	1.80	0.64**	[illegible]	0.50*	−0.12
Ohio	10.68	2.11	0.95**	[illegible]	−0.34	−0.04
Oklahoma	4.42	1.38	0.94**	[illegible]	−0.10	−0.46
Oregon	2.75	1.40	0.26	[illegible]	0.02	0.63**
Pennsylvania	10.65	1.78	0.95**	−0.87**	−0.65**	0.22
Rhode Island	2.40	1.94	0.58*	−0.74**	0.12	−0.56*
South Carolina	9.21	1.54	0.90**	−0.34	0.50*	−0.12
South Dakota	12.89	1.75	0.88**	−0.83**	0.35	−0.68**

TABLE 3-1 (Continued)

State	Financial Ability Ratio[c]	Total Revenue Per Pupil Ratio[d]	Correlations Between Sources of Revenue Per Pupil and Local Financial Ability[e]			
			Local Revenue	Basic State Revenue	State Categorical Revenue[f]	Federal Revenue
Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6	Col. 7
Tennessee	3.74	1.71	0.61**	−0.69**	−0.13	−0.29
Texas	84.52	2.65	0.97**	−0.79**	−0.09	−0.46
Utah	8.55	1.82	0.98**	−0.90**	−0.15	0.81**
Vermont	2.81	2.39	0.50*	−0.72**	0.41	0.56*
Virginia	6.79	2.31	0.91**	−0.75**	0.17	−0.16
Washington	11.76	1.37	0.53*	−0.75**	0.36	−0.20
West Virginia	3.63	1.73	0.90**	−0.75**	0.14	−0.52*
Wisconsin	3.58	1.55	0.90**	−0.82**	0.43	−0.38
Wyoming	3.63	1.63	0.95**	−0.88**	0.20	−0.54*

[a] The financial ability measures employed were those mandated by each state for local district participation in the basic state program.

[b] Revenues were considered in terms of local, basic state, state categorical and federal.

[c] Financial ability ratio represents the quotient between the most able and least able districts within the state.

[d] The ratio of total revenue per pupil received by the district with the highest amount when compared with the district which received the least amount.

[e] Simple correlation coefficients between each revenue category and local financial ability.

*Significant at the 0.05 level.

**Significant at the 0.01 level.

states use the Strayer-Haig-Mort equalization model for the appropriation of state school funds than any other model. Actually, in 1968-69, 34 of the 50 states were using some modification of this model. The Strayer-Haig-Mort equalization model is based on the assumption that the state and local school districts will finance a minimum foundation program of education by a partnership plan. Under this plan, local districts make a required minimum local tax effort in proportion to their taxpaying ability, usually the ability to pay property tax. The state will provide from state funds the difference between the costs of the guaranteed minimum program and the amount of funds which a district can raise by a uniform required local tax effort in proportion to taxpaying ability. The Strayer-Haig-Mort plan provides that state funds per unit of need are apportioned in inverse relationship to the taxpaying ability per unit of need of local school districts. However, any finance model including the Strayer-Haig-

TABLE 3-2

PERCENTAGE OF TOTAL REVENUE BY CATEGORY[a] FOR SELECTED SCHOOL DISTRICTS WITHIN EACH STATE

State[b]	*Local Revenue Per Child*	*Basic State Revenue Per Child*	*State Categorical*[c] *Revenue Per Child*	*Federal Revenue Per Child*
Alabama	20%	55%	4%	21%
Alaska	39	48	3	10
Arizona	32	56	2	10
Arkansas	45	39	2	14
California	58	28	6	8
Colorado	61	18	10	11
Connecticut	73	21	3	3
Delaware	26	70	—	4
Florida	31	54	5	10
Georgia	28	56	3	13
Idaho	48	40	1	11
Illinois	67	24	4	5
Indiana	64	21	11	4
Iowa	61	34	1	4
Kansas	64	29	3	4
Kentucky	31	53	—	16
Louisiana	39	49	5	7
Maine	68	21	2	9
Maryland	56	27	5	12
Massachusetts	79	12	2	7
Michigan	42	41	1	6
Minnesota	55	34	15	6
Mississippi	22	53	6	19
Missouri	62	24	3	11
Montana	68	20	1	11
Nebraska	76	11	4	9
Nevada	54	36	1	9
New Hampshire	88	4	3	5
New Jersey	82	13	1	4
New Mexico	14	56	9	21
New York	45	48	4	3
North Carolina	21	53	11	15
North Dakota	64	24	4	8
Ohio	64	30	1	5
Oklahoma	61	21	9	9
Oregon	73	19	4	4
Pennsylvania	53	36	6	5
Rhode Island	62	32	2	4
South Carolina	26	44	11	19
South Dakota	69	9	3	19

TABLE 3-2 (Continued)

State[b]	*Local Revenue Per Child*	*Basic State Revenue Per Child*	*State Categorical*[c] *Revenue Per Child*	*Federal Revenue Per Child*
Tennessee	35	44	3	18
Texas	52	22	17	9
Utah	37	51	1	11
Vermont	72	25	2	1
Virginia	54	30	4	12
Washington	38	45	9	8
West Virginia	34	49	3	14
Wisconsin	72	21	2	5
Wyoming	65	25	9	1

[a] The revenue categories considered in this analysis were total local revenue per pupil, basic state revenue per pupil, state categorical revenue per pupil and federal revenue per pupil.

[b] All states were considered except for the state of Hawaii, which contained no local school districts for the year 1968-69.

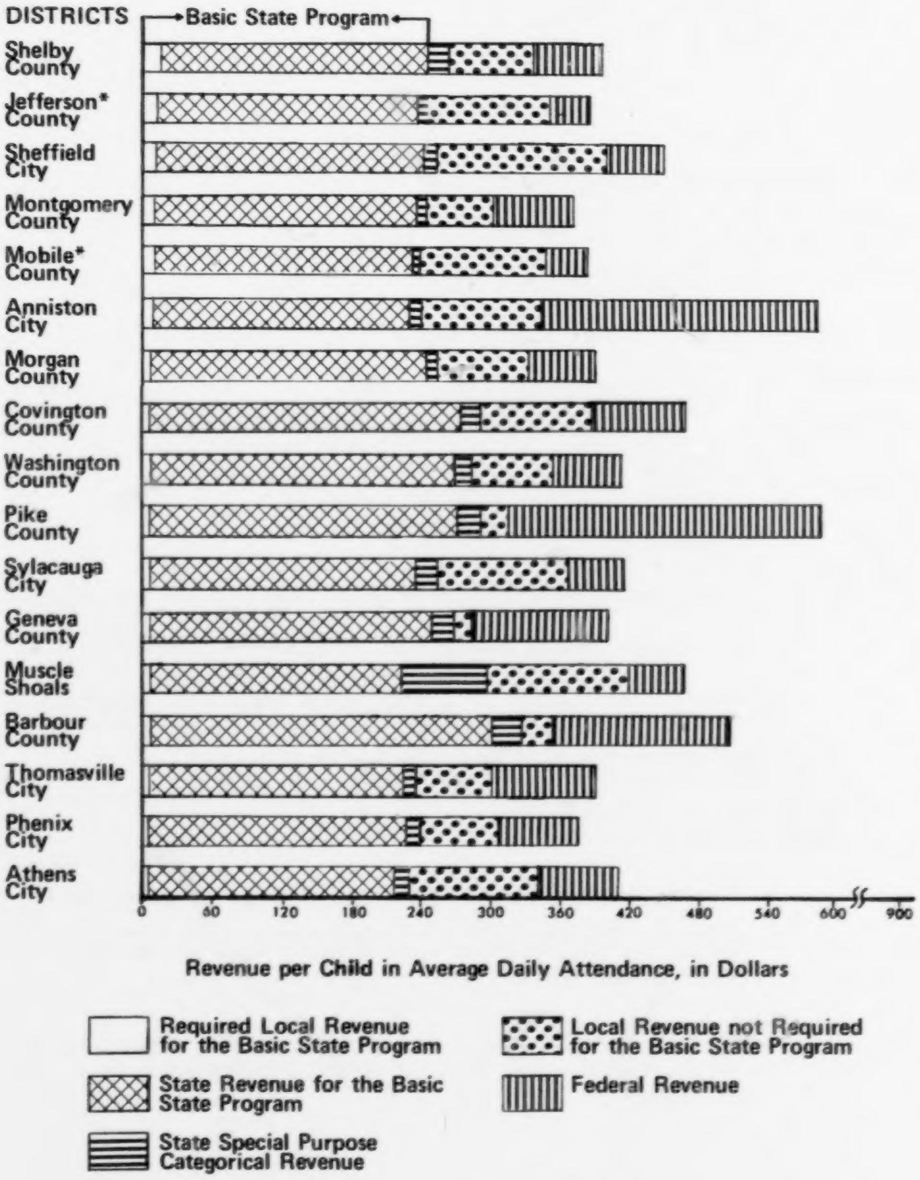
[c] All state categorical aids were considered except those specifically allocated for capital outlay, debt service, or transportation.

Mort equalization model can be manipulated so that different variations of the model will have widely different effects on the equalization of educational opportunity.

Let us contrast the profile of Idaho, shown in Figure 12 with a profile of Indiana shown in Figure 14. Both states use the Strayer-Haig-Mort equalization model. Ignoring federal funds, it is noted from Figure 12, that approximately 3/4 of state and local revenue in Idaho is included in the basic state program guaranteed throughout the state. This means that 3/4 of all state and local revenue in Idaho is equalized. It will also be noted from Figure 12 that there is very little difference between the revenue per pupil from state and local sources of the districts with the least wealth than revenue of the districts of the greatest wealth.

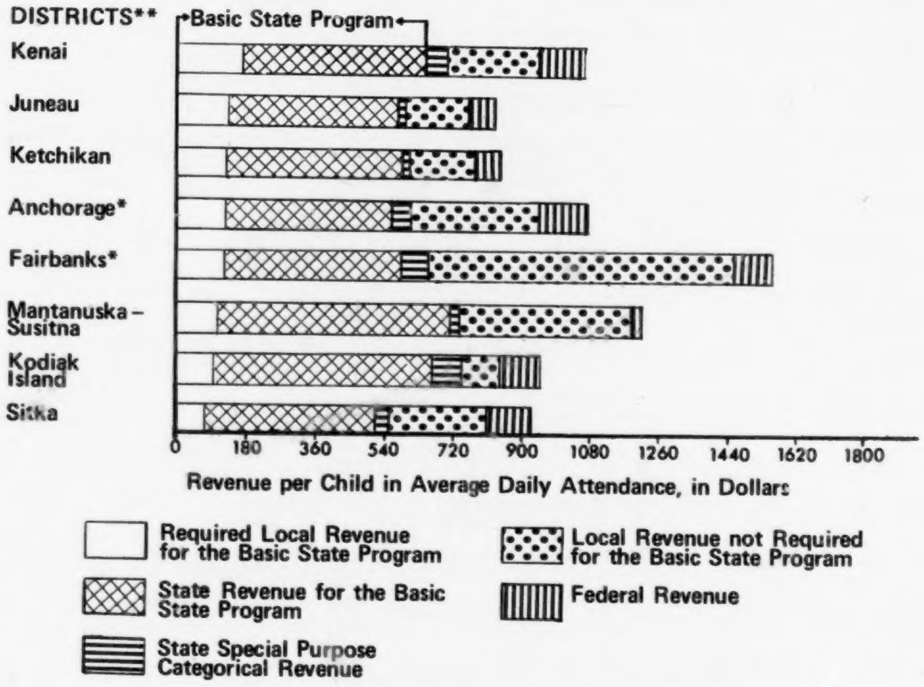
The profile for Indiana presents a different picture. It will be noted from Figure 14 that the basic state foundation program guaranteed to all districts in Indiana comprises only about 30% of state and local revenue. It will also be noted from Figure 14 that there is a great deal of difference between the total revenue available per pupil in the least wealthy districts in Indiana as compared with the most wealthy.

Let us now examine the profile for Alabama shown in Fig. 2.



* The two largest school districts in terms of average daily attendance.

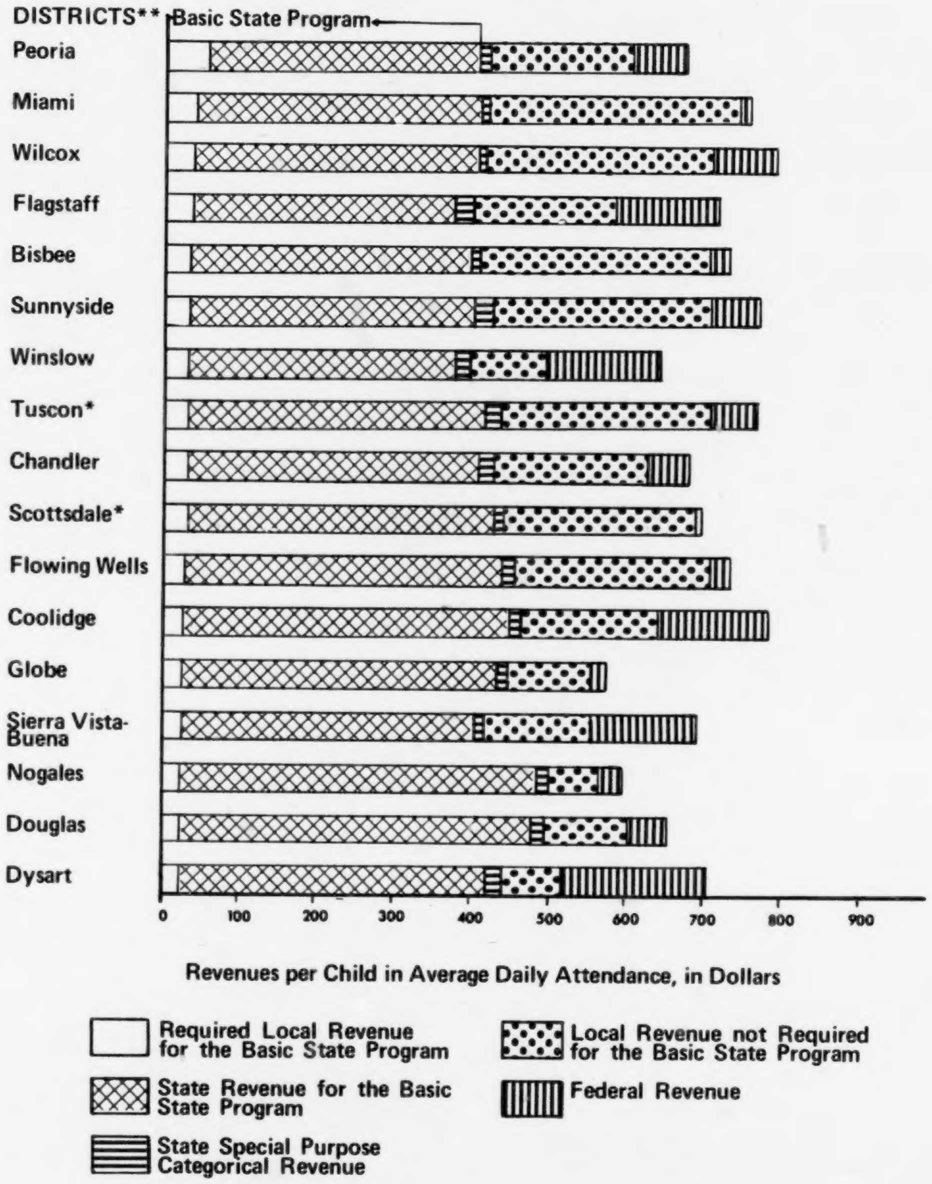
FIGURE 2. Revenues Available to Selected School Districts (Having 1500 and Above in ADA and Ranging from the Most to the Least Wealthy) in Alabama for 1968 - 1969



* The two largest school districts in terms of average daily attendance.

** There are only eight districts in Alaska having an ADA equal to or greater than 1500. However, these districts account for more than 85 per cent of the total state ADA.

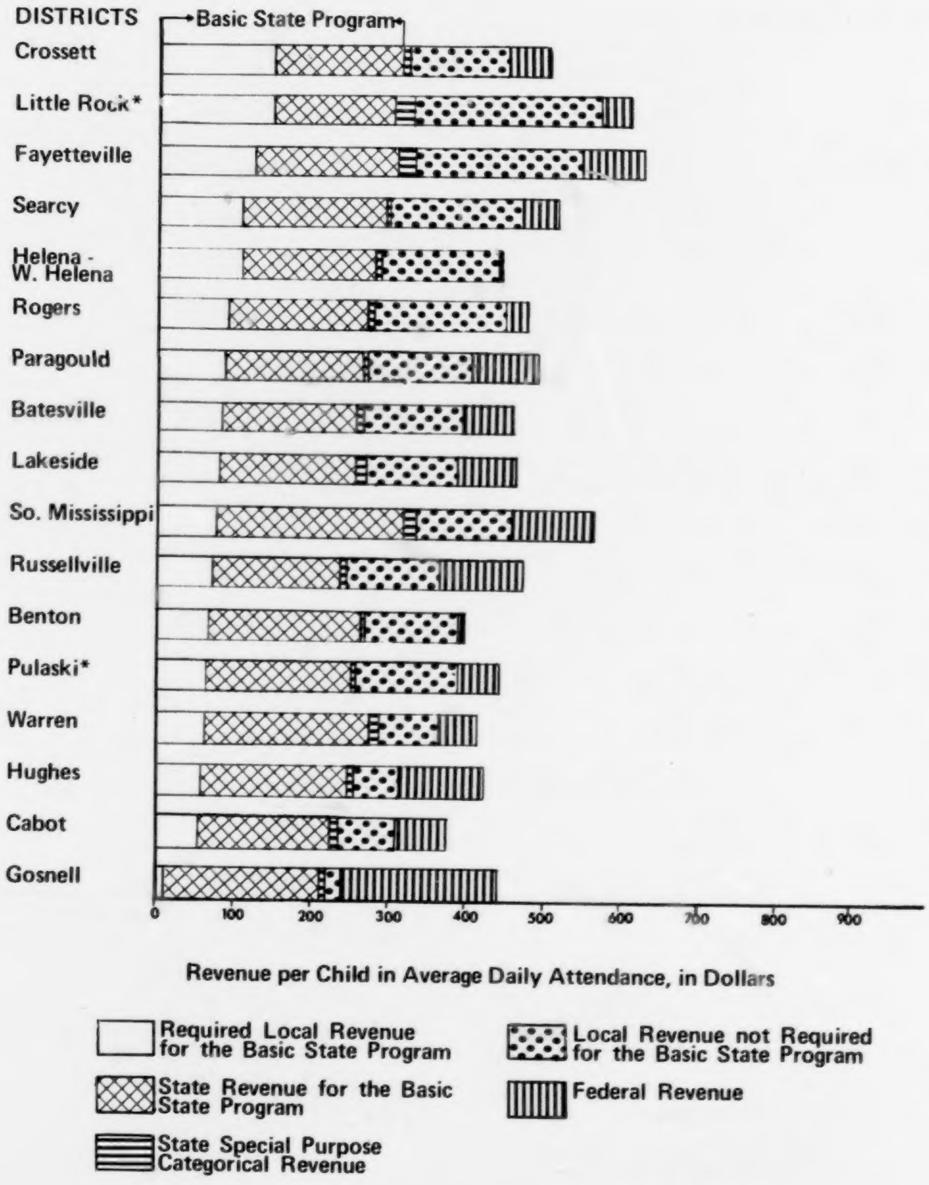
FIGURE 3. Revenues Available to Selected School Districts (Having 1500 and Above in ADA and Ranging from the Most to the Least Wealthy) in Alaska for 1968 - 1969



* The two largest school districts in terms of average daily attendance.

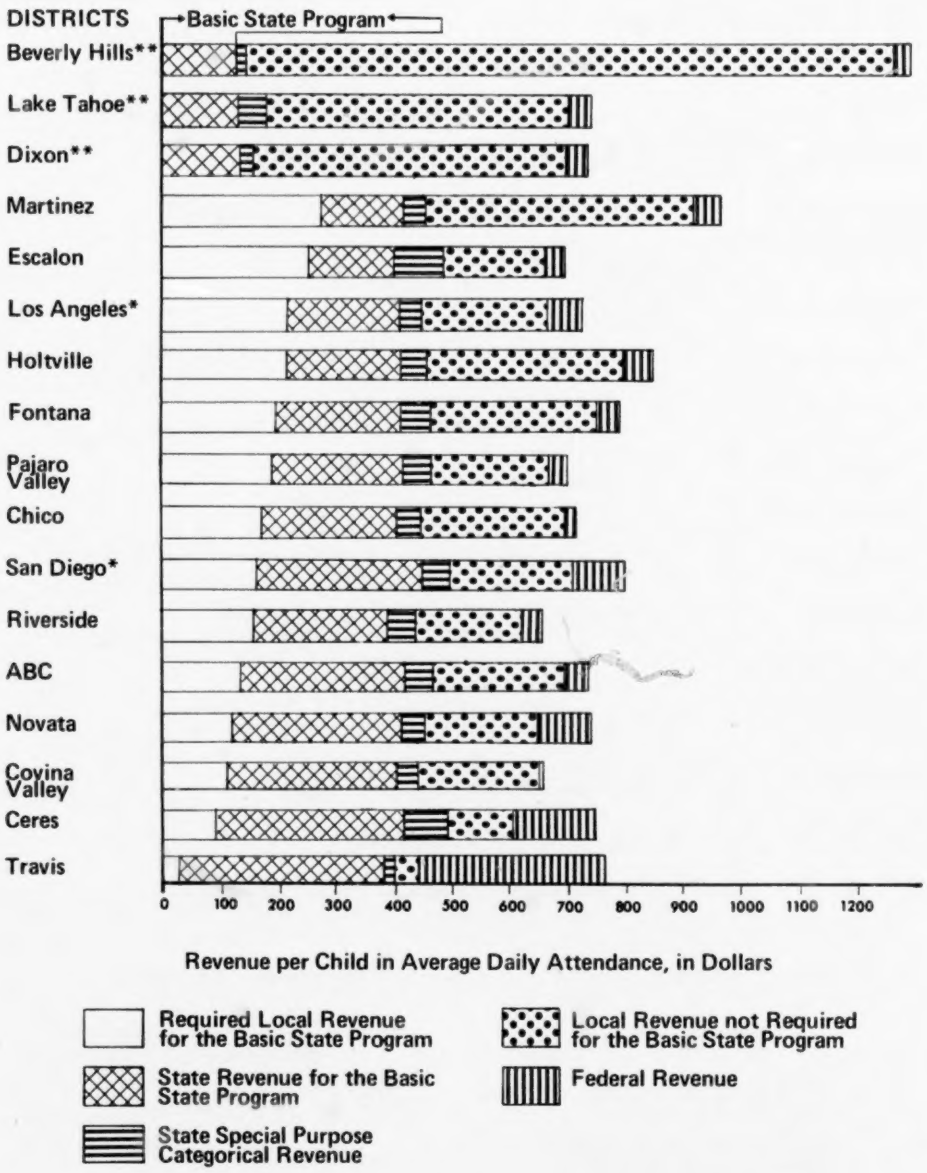
** Elementary and high school districts in Arizona were combined to form instructional grades K - 12.

FIGURE 4. Revenues Available to Selected School Districts (Having 1500 and Above in ADA and Ranging from the Most to the Least Wealthy) in Arizona for 1968 - 1969



* The two largest school districts in terms of average daily attendance.

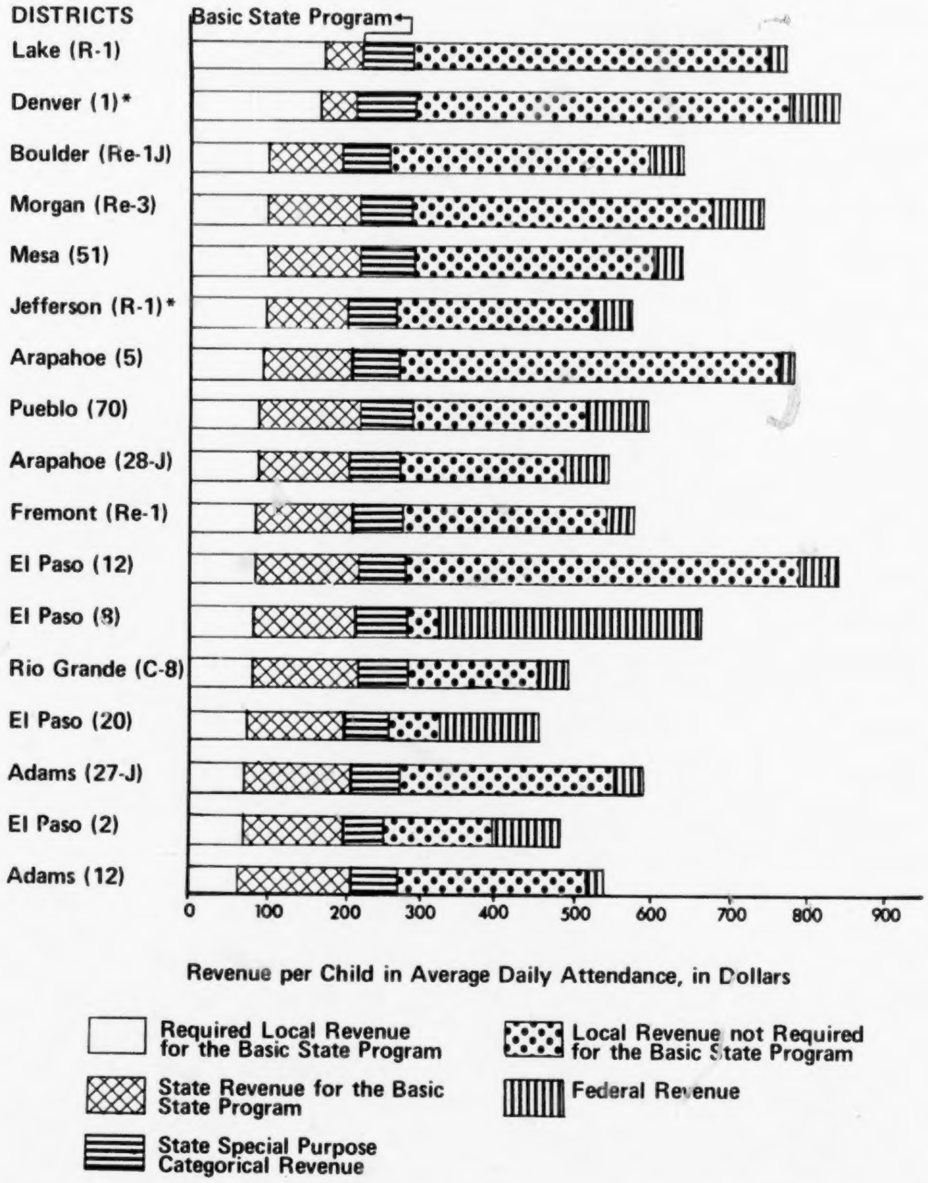
FIGURE 5. Revenues Available to Selected School Districts (Having 1500 and Above in ADA and Ranging from the Most to the Least Wealthy) in Arkansas for 1968 - 1969



* The two largest school districts in terms of average daily attendance.

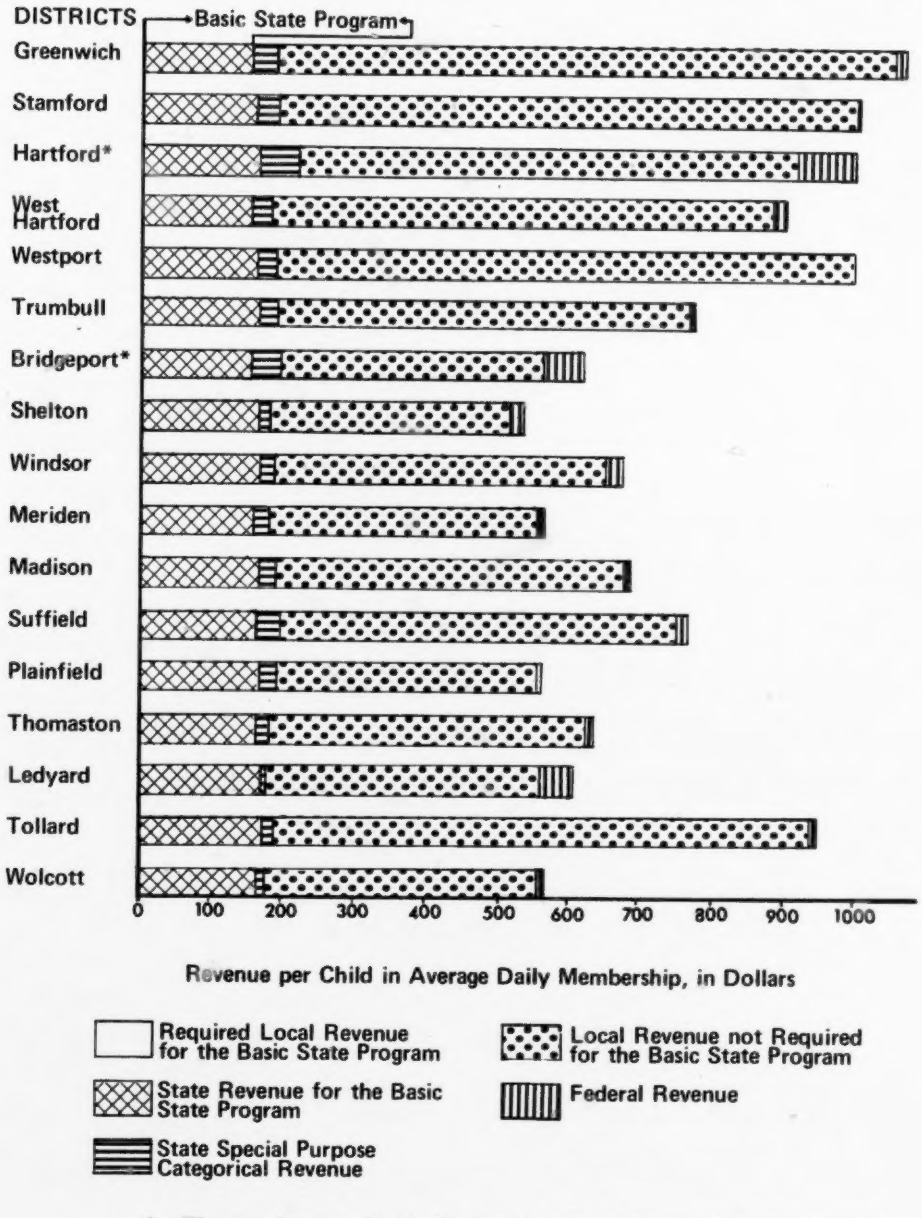
** These three districts did not participate in the equalization portion of the basic state program and did not have a local revenue requirement.

FIGURE 6. Revenues Available to Selected School Districts (Having 1500 and Above in ADA and Ranging from the Most to the Least Wealthy) in California for 1968 - 1969



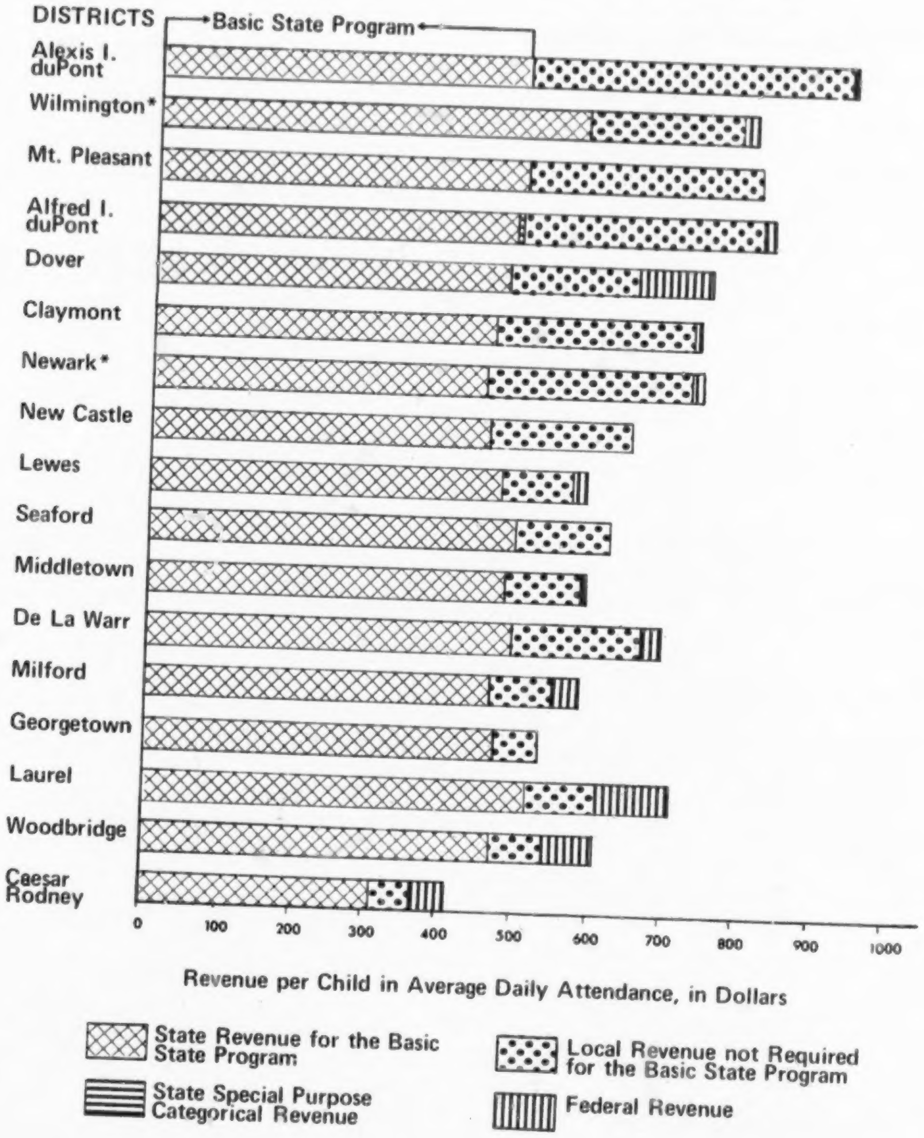
* The two largest school districts in terms of average daily attendance.

FIGURE 7. Revenues Available to Selected School Districts (Having 1500 and Above in ADA and Ranging from the Most to the Least Wealthy) in Colorado for 1968 - 1969



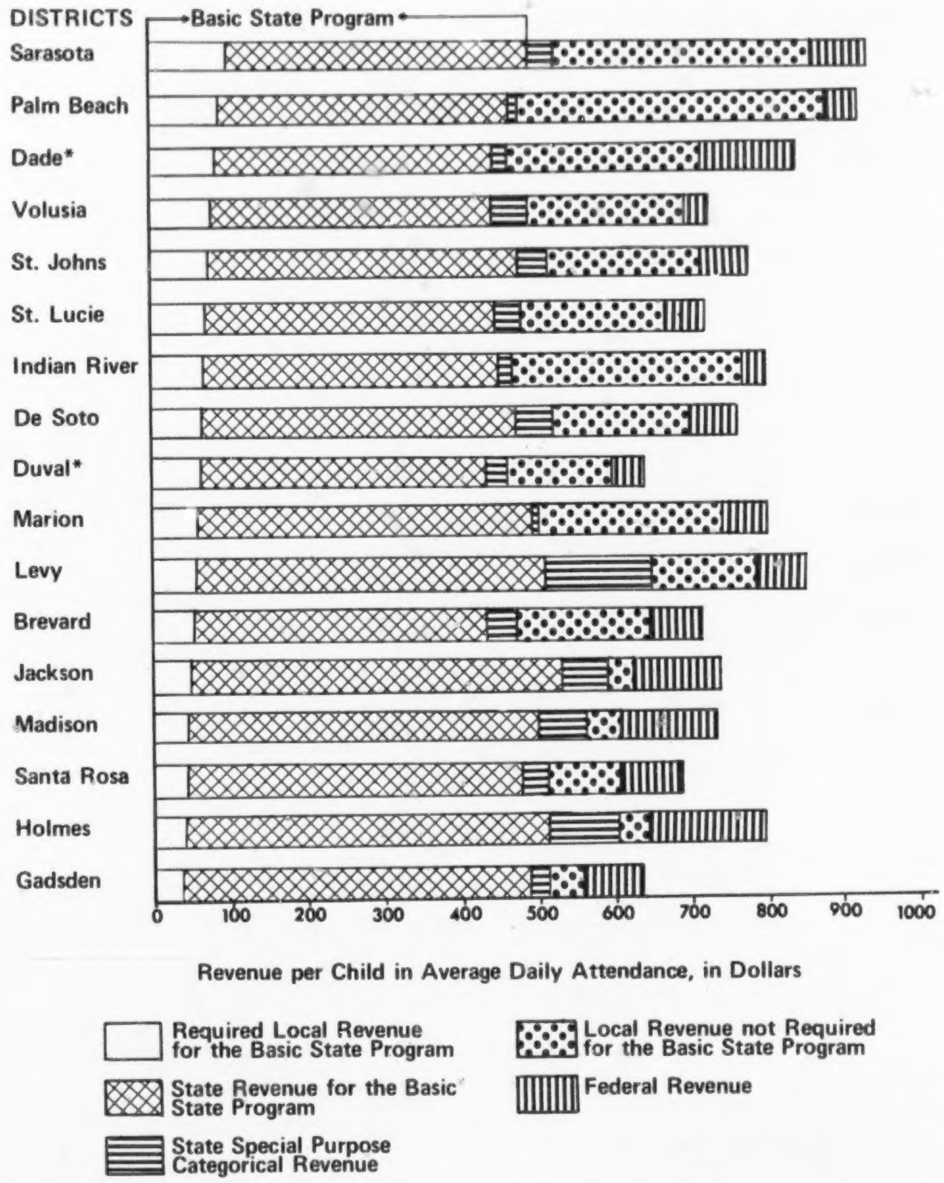
* The two largest school districts in terms of average daily membership.

FIGURE 8. Revenues Available to Selected School Districts (Having 1500 and Above in Average Daily Membership and Ranging from the Most to the Least Wealthy) in Connecticut for 1968 -1969



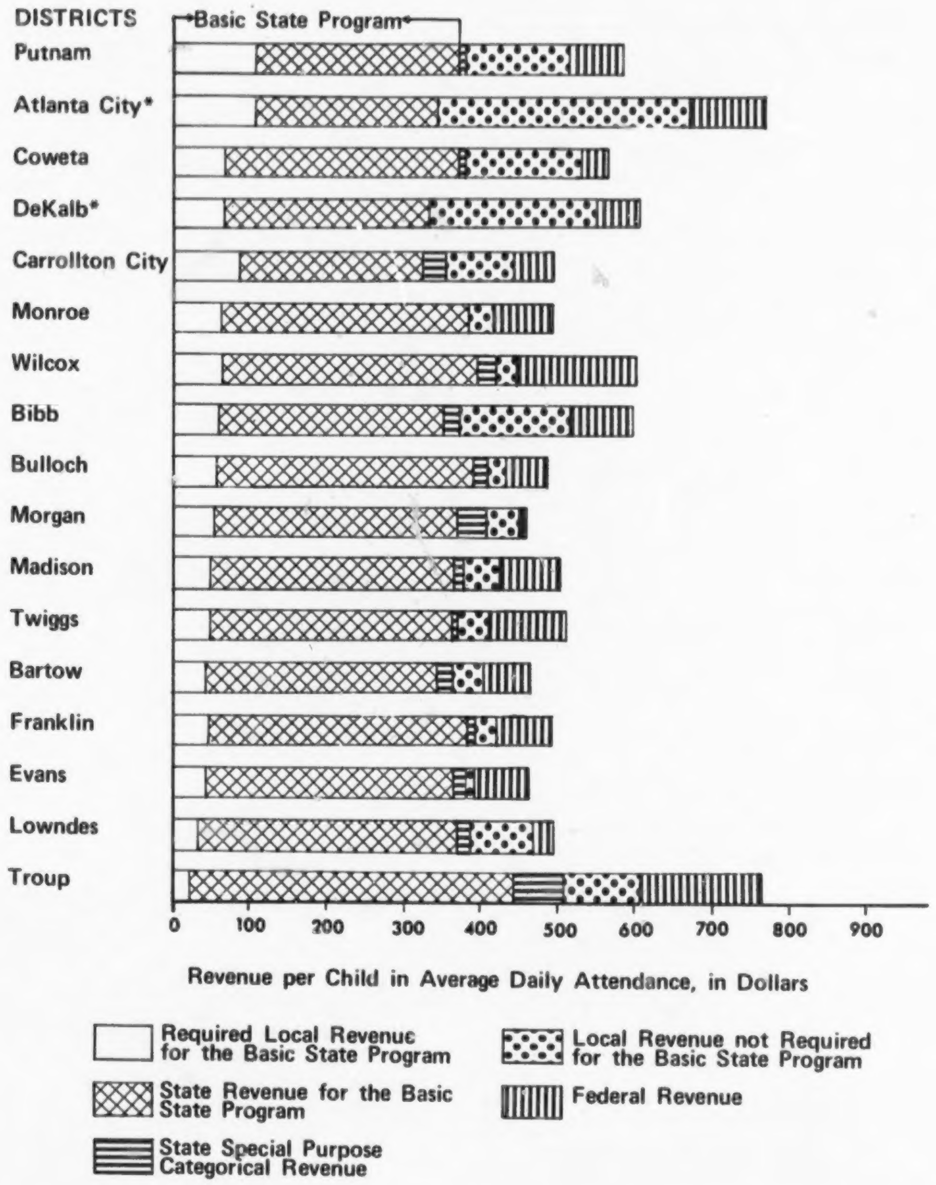
* The two largest school districts in terms of average daily attendance.

FIGURE 9. Revenues Available to Selected School Districts (Having 1500 and Above in ADA and Ranging from the Most to the Least Wealthy) in Delaware for 1968 - 1969



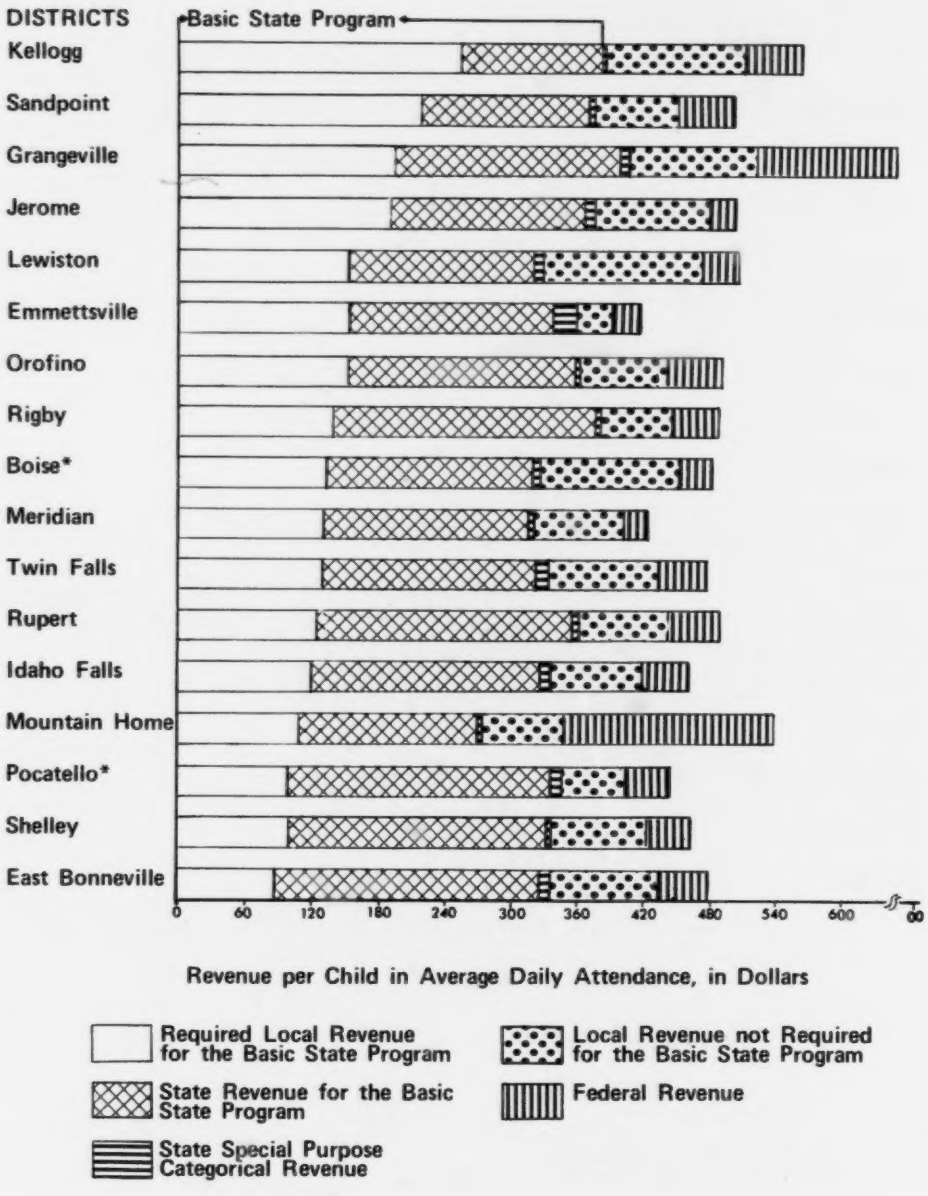
* The two largest school districts in terms of average daily attendance.

FIGURE 10. Revenues Available to Selected School Districts (Having 1500 and Above in ADA and Ranging from the Most to the Least Wealthy) in Florida for 1968 - 1969



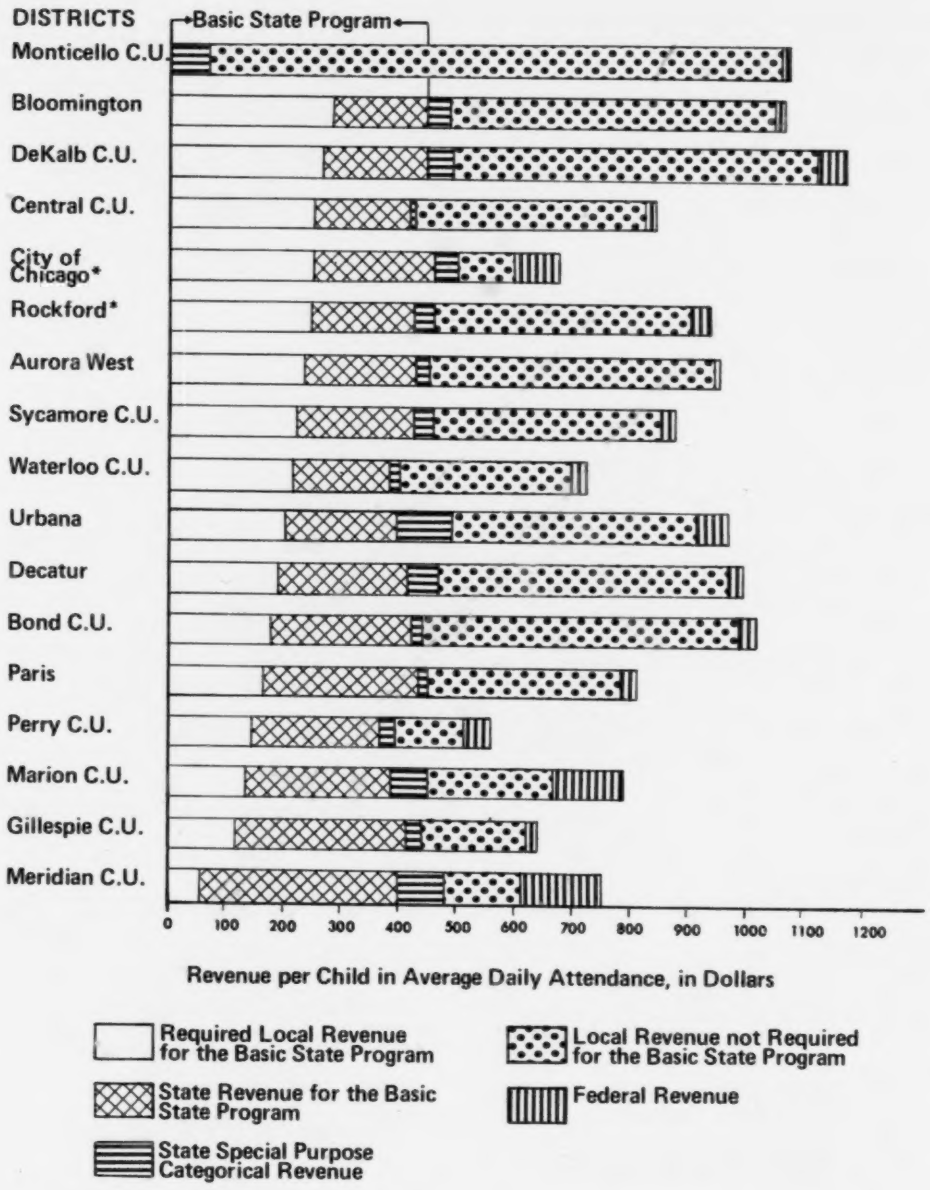
* The two largest school districts in terms of average daily attendance.

FIGURE 11. Revenues Available to Selected School Districts (Having 1500 and Above in ADA and Ranging from the Most to the Least Wealthy) in Georgia for 1968 - 1969



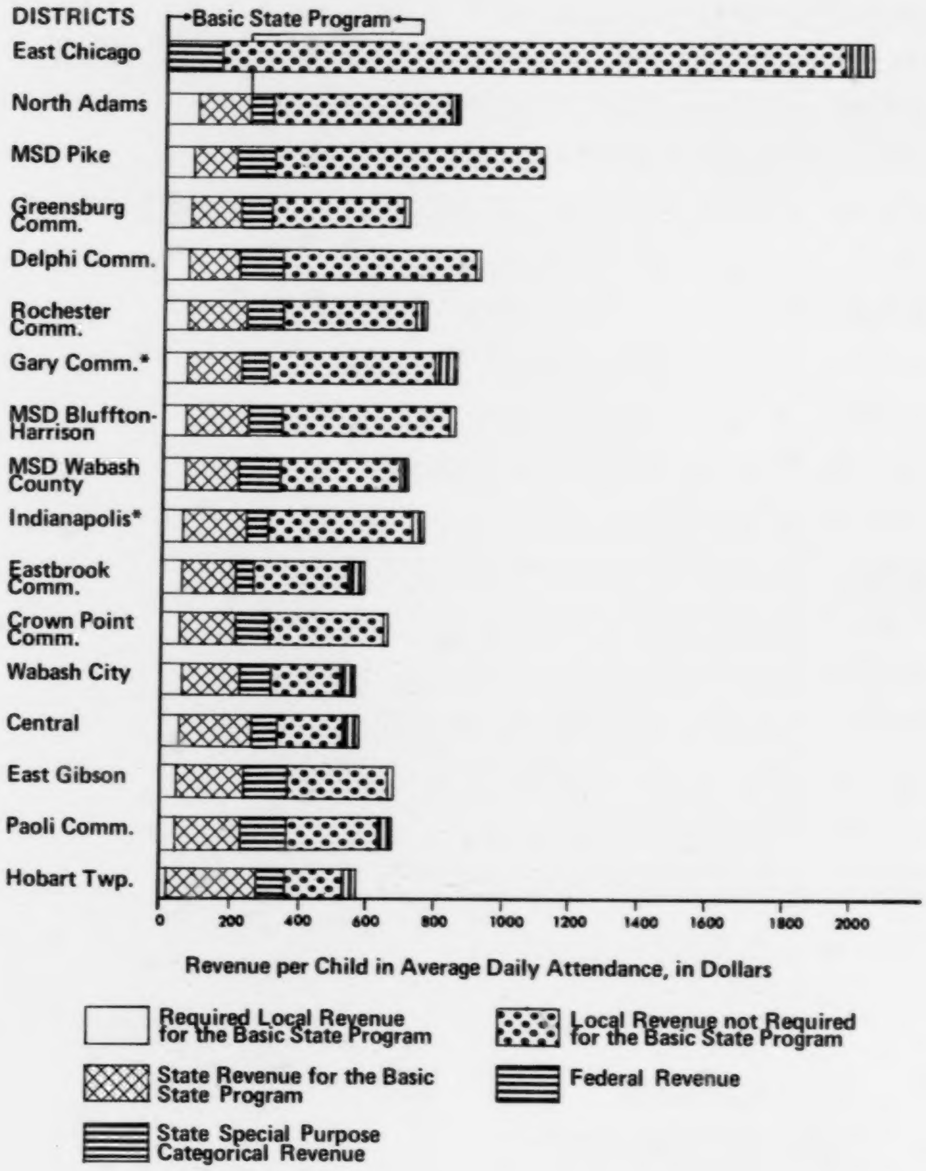
* The two largest school districts in terms of average daily attendance.

FIGURE 12. Revenues Available to Selected School Districts (Having 1500 and Above in ADA and Ranging from the Most to the Least Wealthy) in Idaho for 1968 - 1969



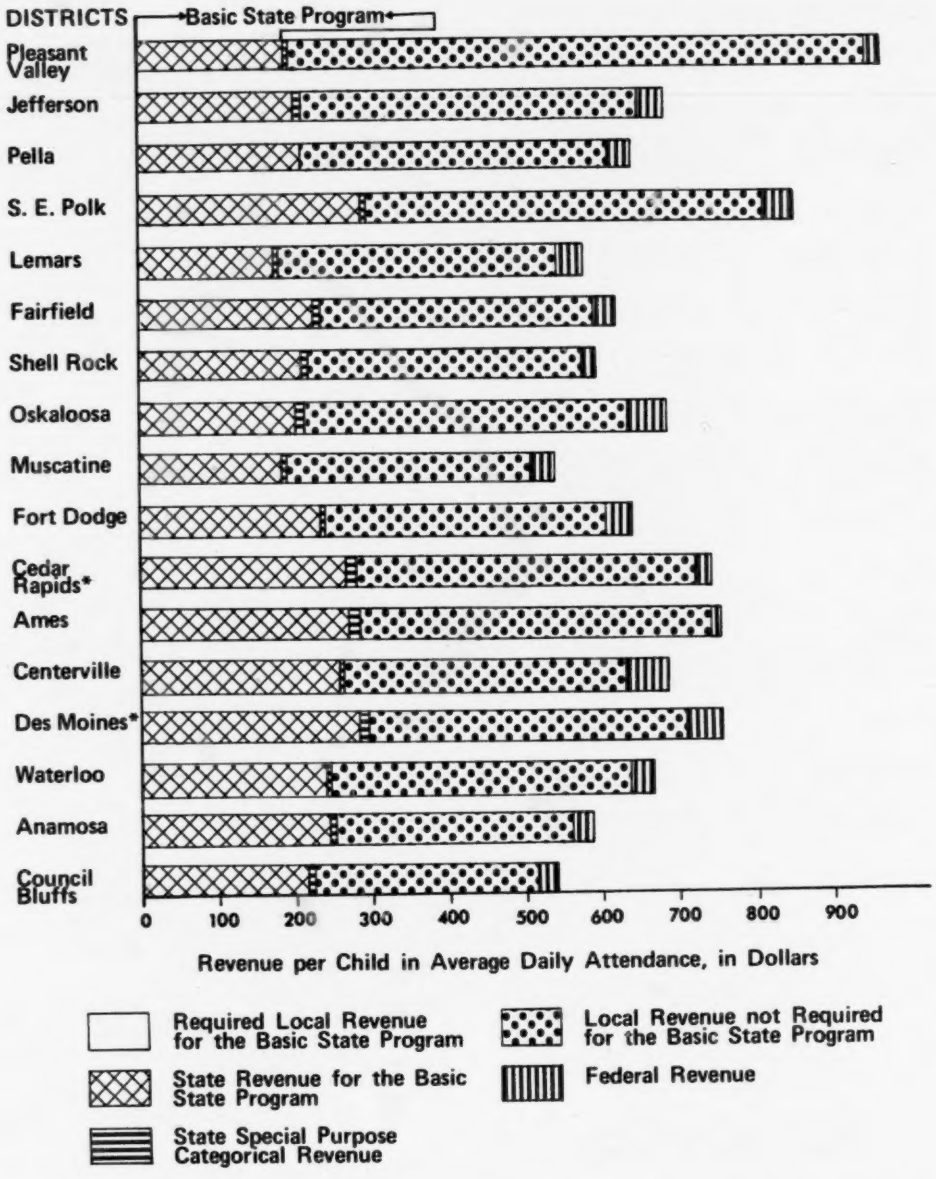
* The two largest school districts in terms of average daily attendance.

FIGURE 13. Revenues Available to Selected School Districts (Having 1500 and Above in ADA and Ranging from the Most to the Least Wealthy) in Illinois for 1968 - 1969



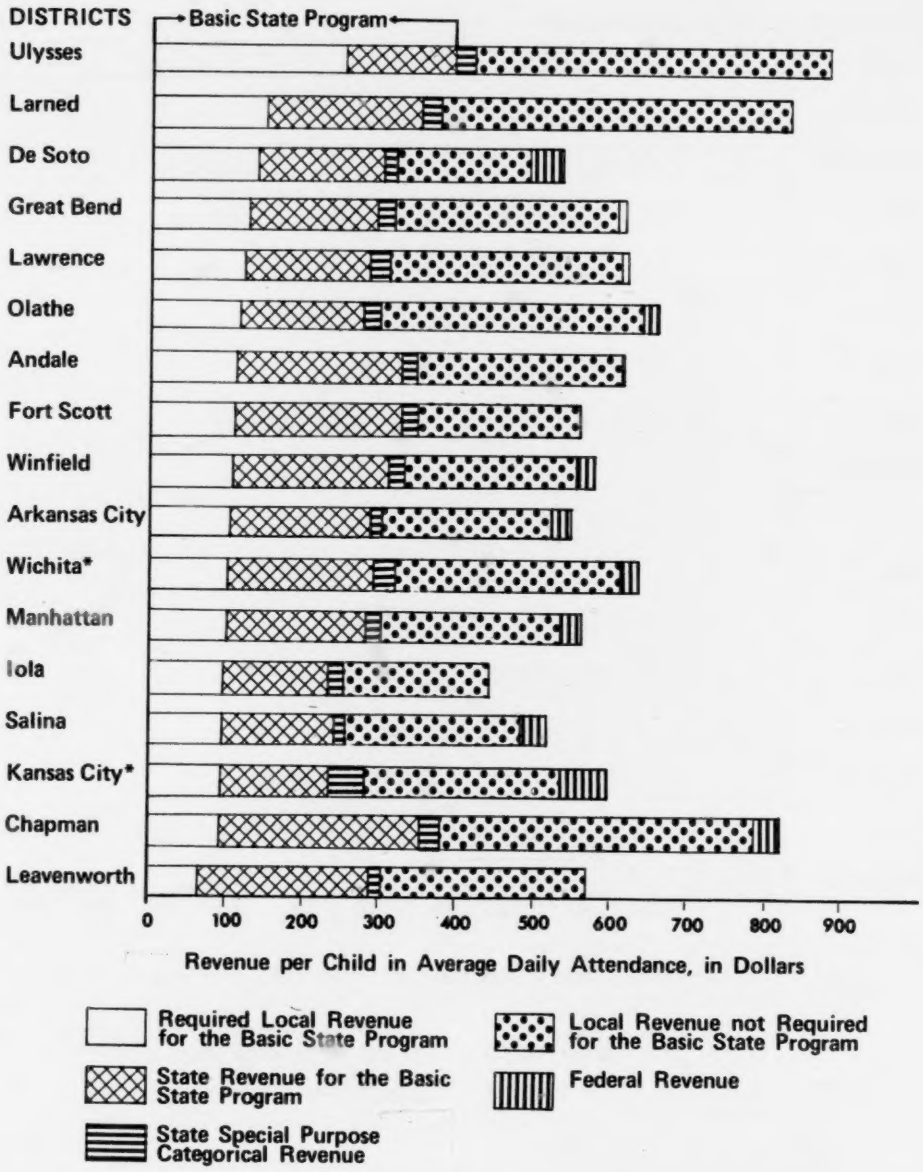
* The two largest school districts in terms of average daily attendance.

FIGURE 14. Revenues Available to Selected School Districts (Having 1500 and Above in ADA and Ranging from the Most to the Least Wealthy) in Indiana for 1968 - 1969



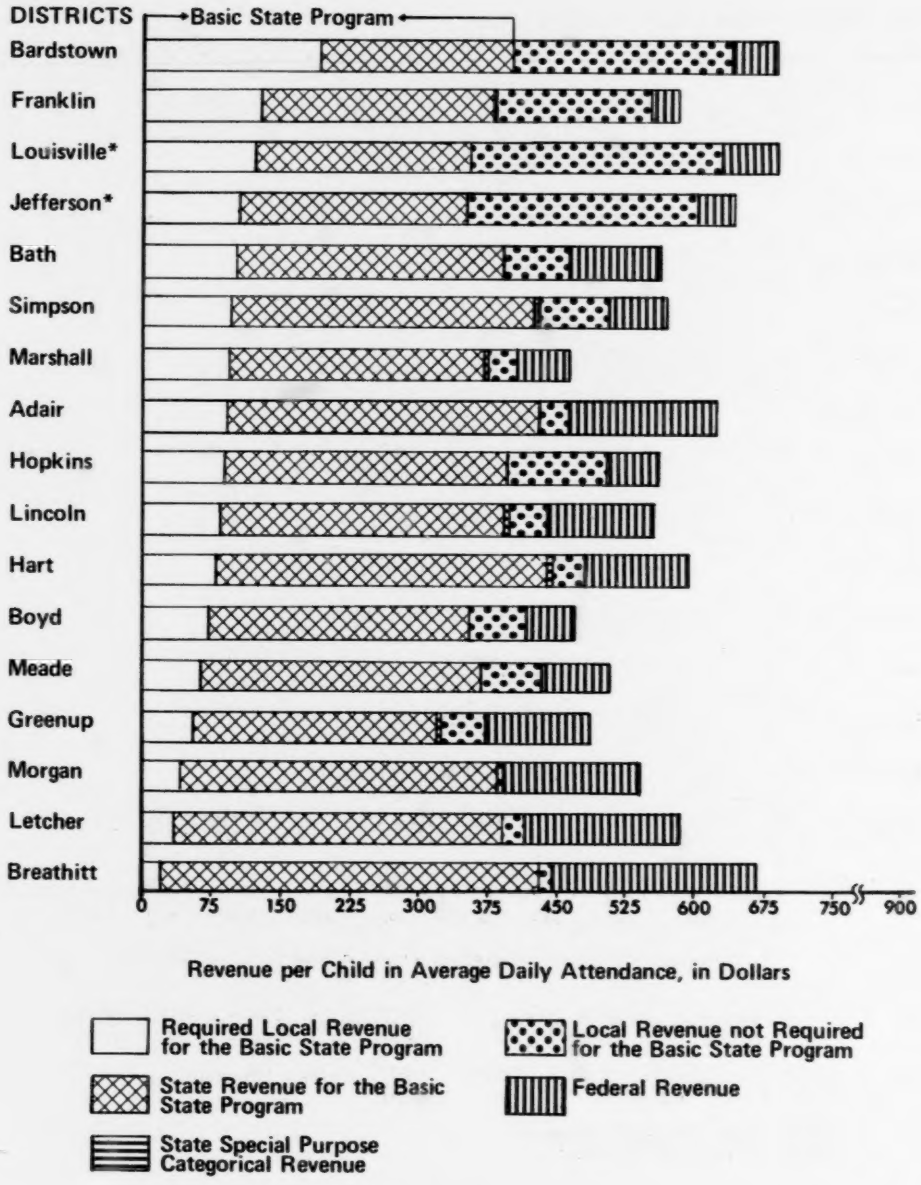
* The two largest school districts in terms of average daily attendance.

FIGURE 15. Revenues Available to Selected School Districts (Having 1500 and Above in ADA and Ranging from the Most to the Least Wealthy) in Iowa for 1968 - 1969



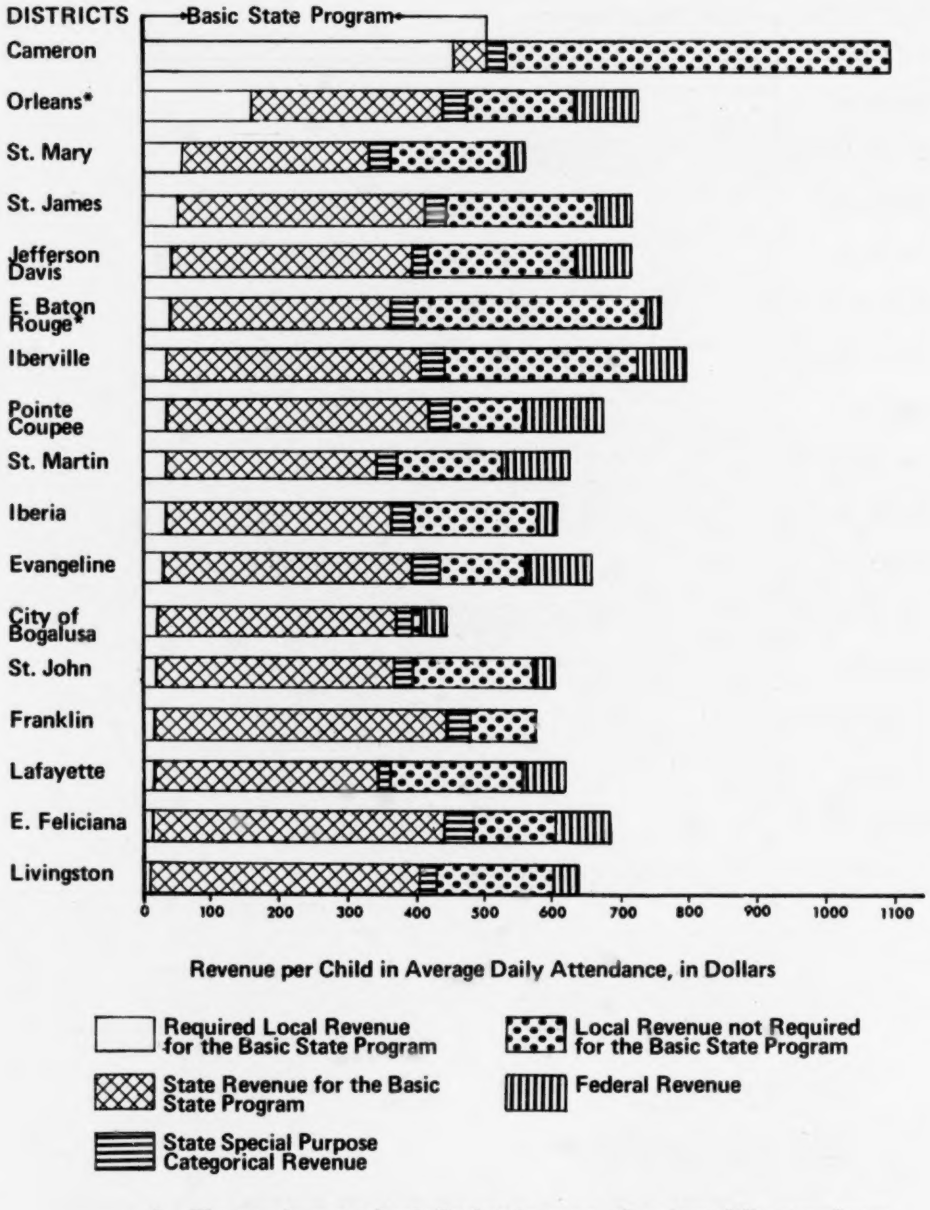
* The two largest school districts in terms of average daily attendance.

FIGURE 16. Revenues Available to Selected School Districts (Having 1500 and Above in ADA and Ranging from the Most to the Least Wealthy) in Kansas for 1968 - 1969



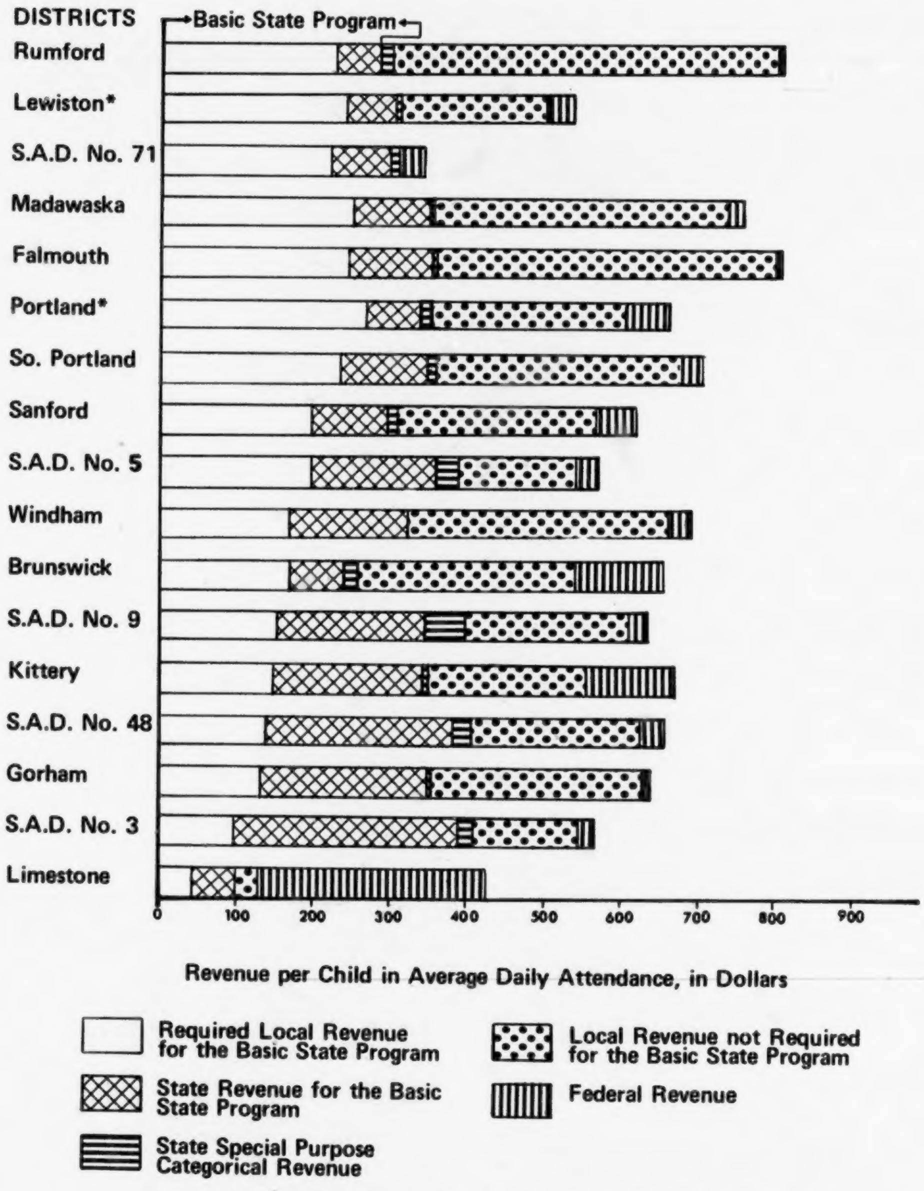
* The two largest school districts in terms of average daily attendance.

FIGURE 17. Revenues Available to Selected School Districts (Having 1500 and Above in ADA and Ranging from the Most to the Least Wealthy) in Kentucky for 1968 - 1969



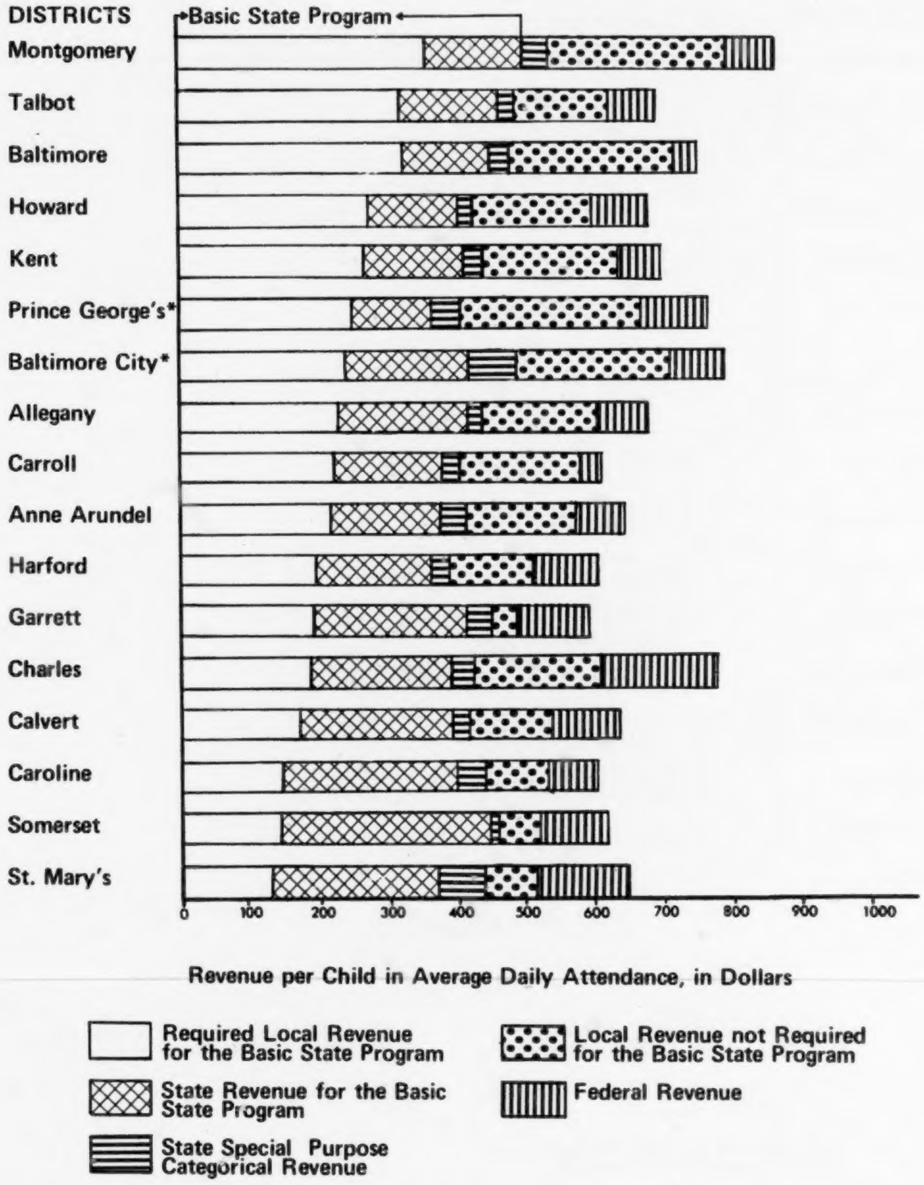
* The two largest school districts in terms of average daily attendance.

FIGURE 18. Revenues Available to Selected School Districts (Having 1500 and Above in ADA and Ranging from the Most to the Least Wealthy) in Louisiana for 1968 - 1969



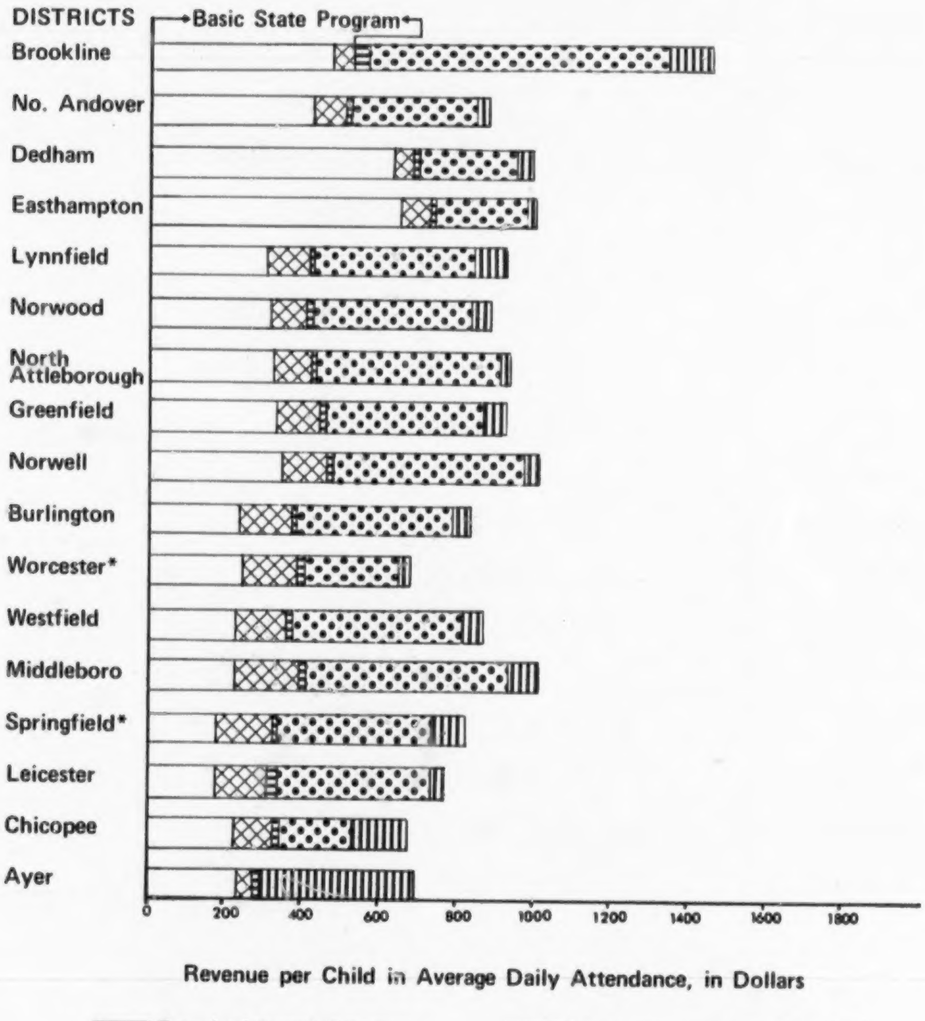
* The two largest school districts in terms of average daily attendance.

FIGURE 19. Revenue Available to Selected School Districts (Having 1500 and Above in ADA and Ranging from the Most to the Least Wealthy) in Maine for 1968 - 1969



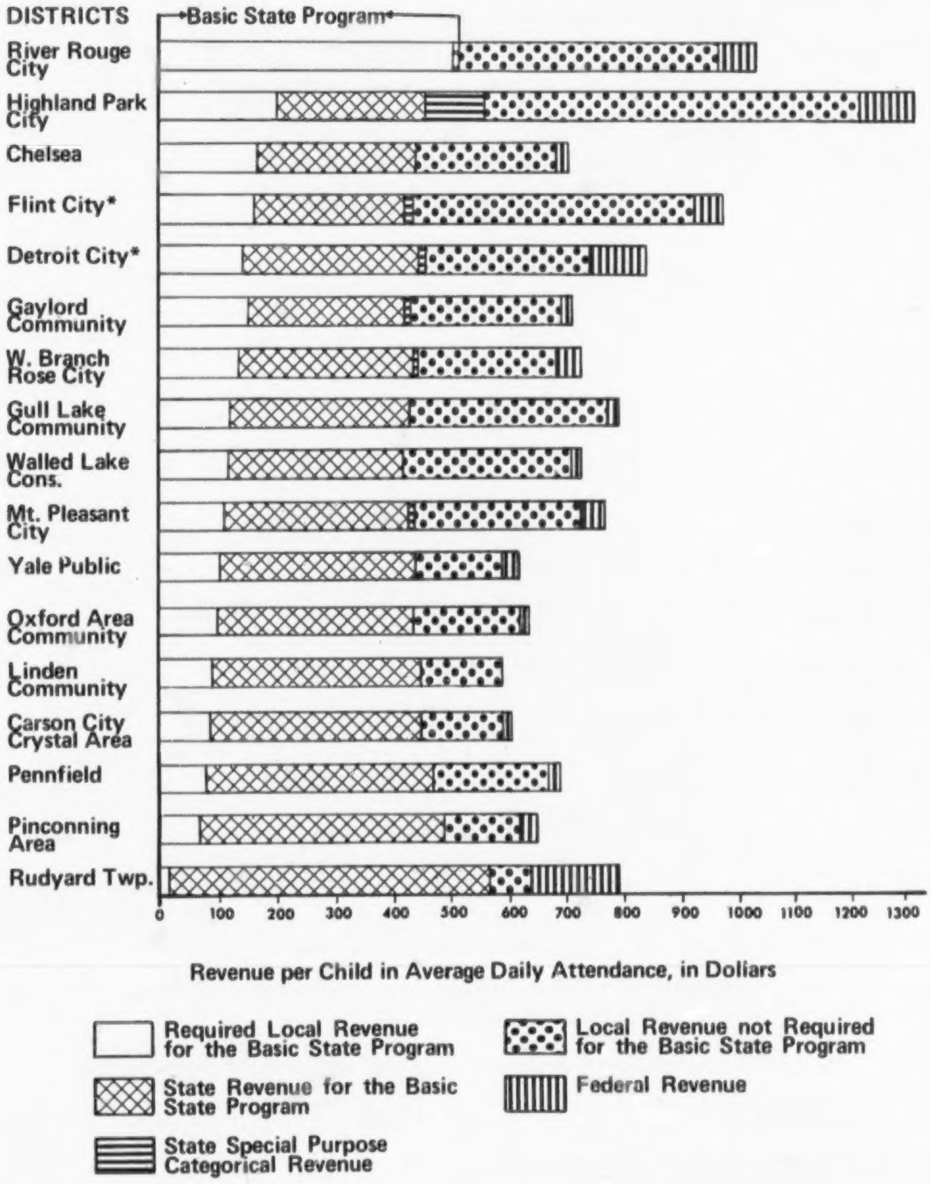
* The two largest school districts in terms of average daily attendance.

FIGURE 20. Revenues Available to Selected School Districts (Having 1500 and Above in ADA and Ranging from the Most to the Least Wealthy) in Maryland for 1968 - 1969



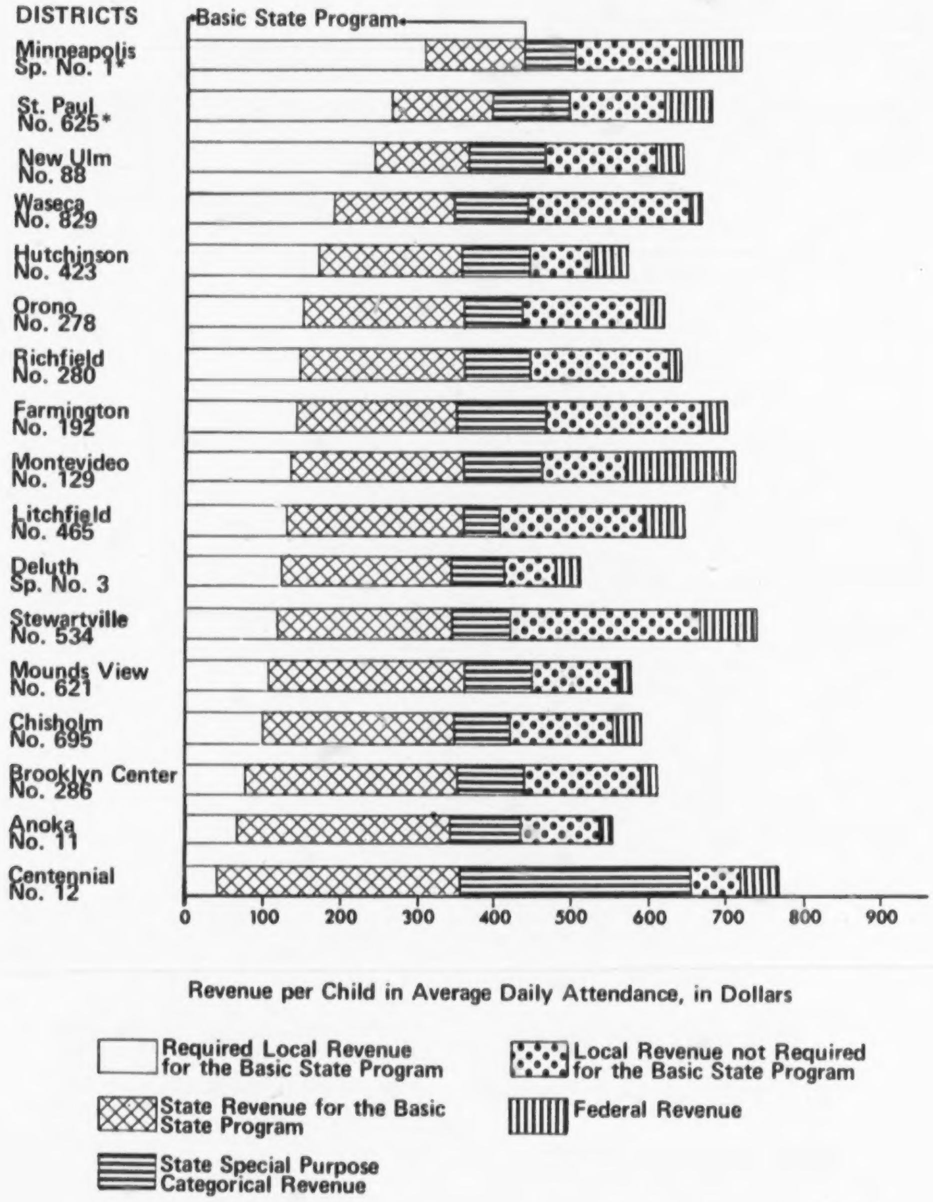
* The two largest school districts in terms of average daily attendance.

FIGURE 21. Revenues Available to Selected School Districts (Having 1500 and Above in ADA and Ranging from the Most to the Least Wealthy) in Massachusetts for 1968 - 1969



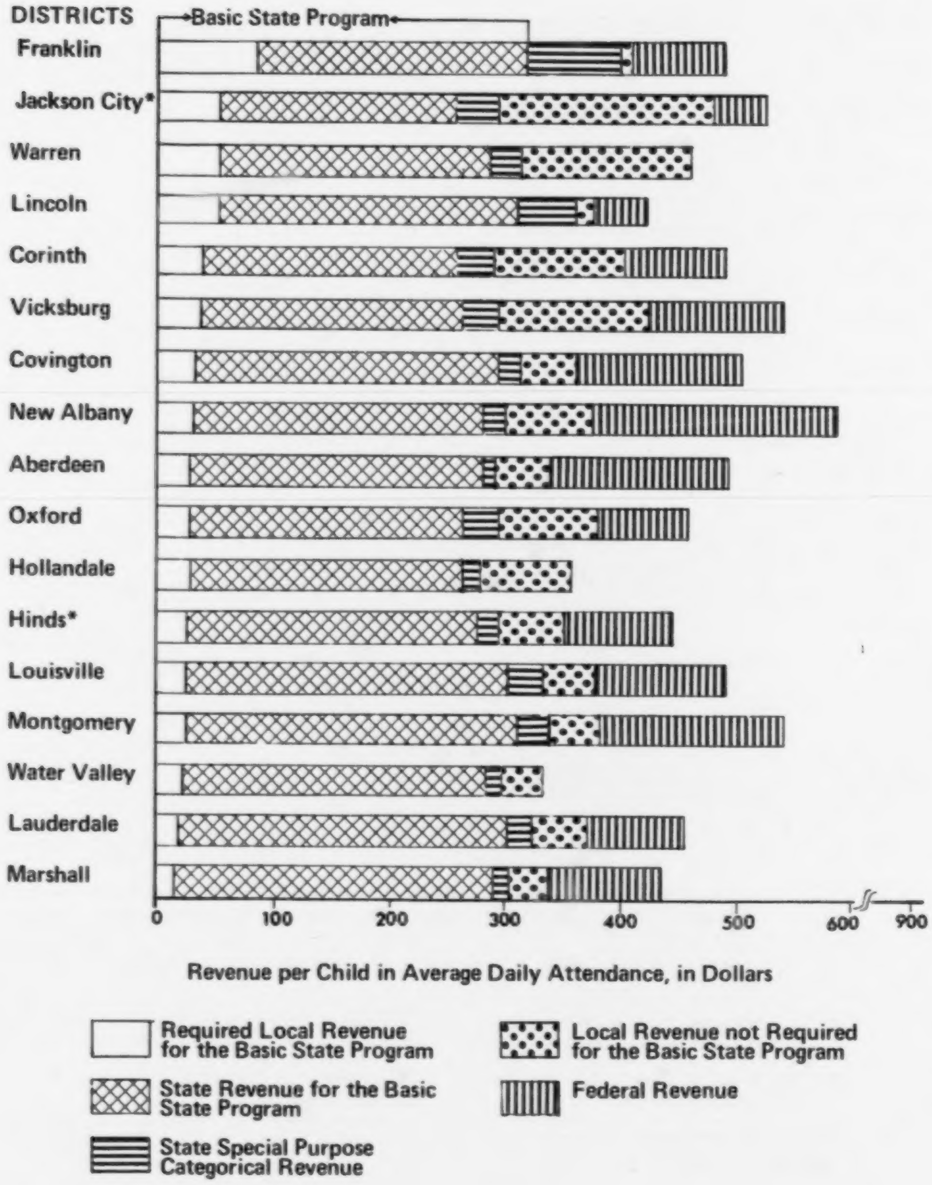
* The two largest school districts in terms of average daily attendance.

FIGURE 22. Revenues Available to Selected School Districts (Having 1500 and Above in ADA and Ranging from the Most to the Least Wealthy) in Michigan for 1968 - 1969



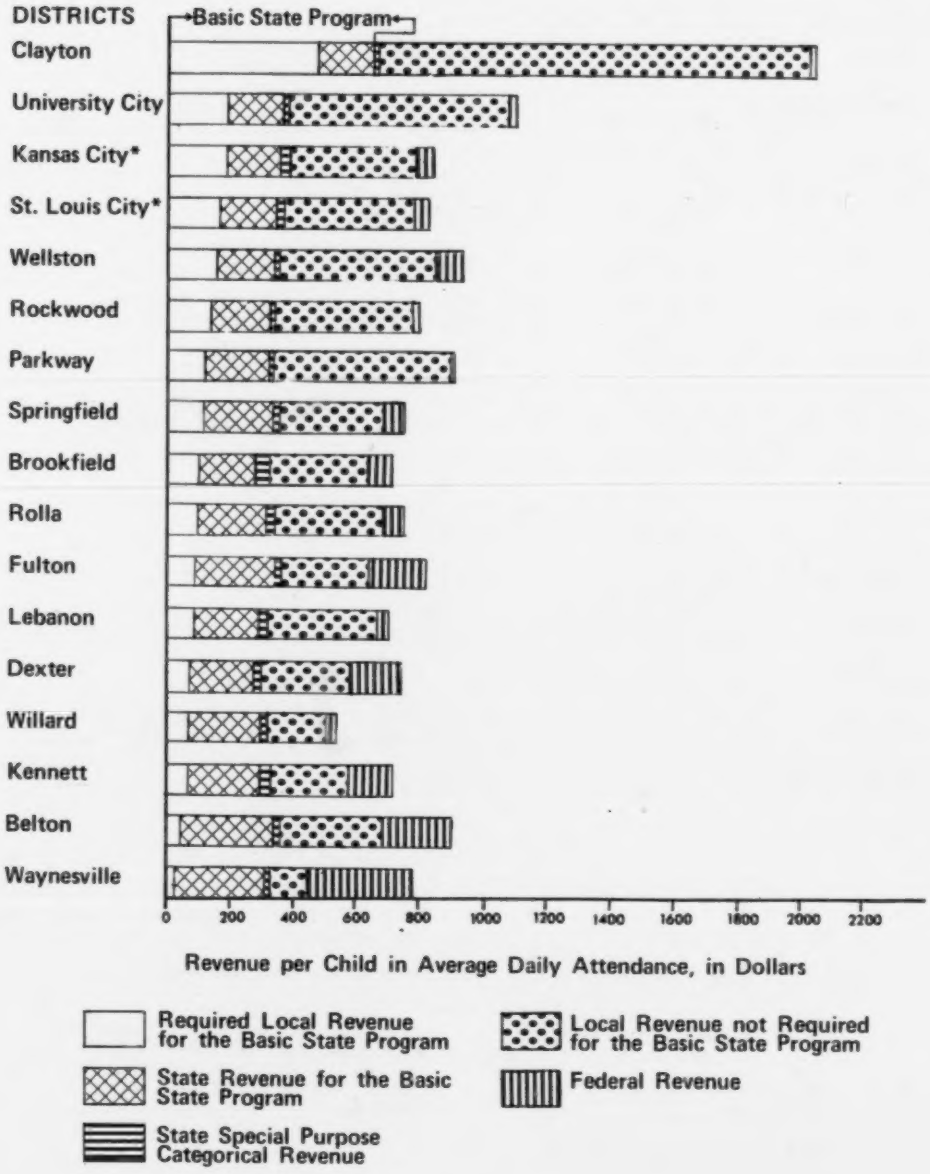
* The two largest school districts in terms of average daily attendance.

FIGURE 23. Revenue Available to Selected School Districts (Having 1500 and Above in ADA and Ranging from the Most to the Least Wealthy) in Minnesota for 1968 - 1969



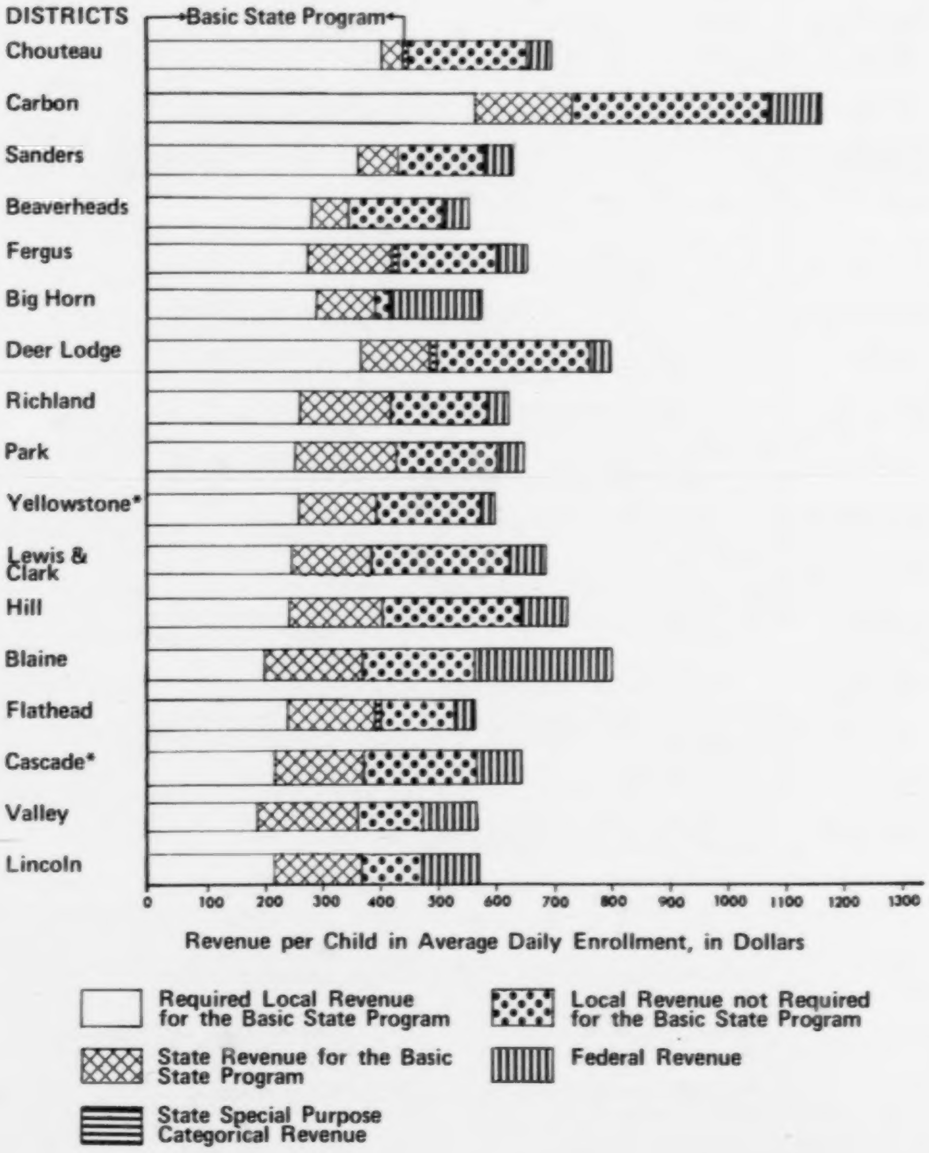
* The two largest school districts in terms of average daily attendance.

FIGURE 24. Revenues Available to Selected School Districts (Having 1500 and Above in ADA and Ranging from the Most to the Least Wealthy) in Mississippi for 1968 - 1969



* The two largest school districts in terms of average daily attendance.

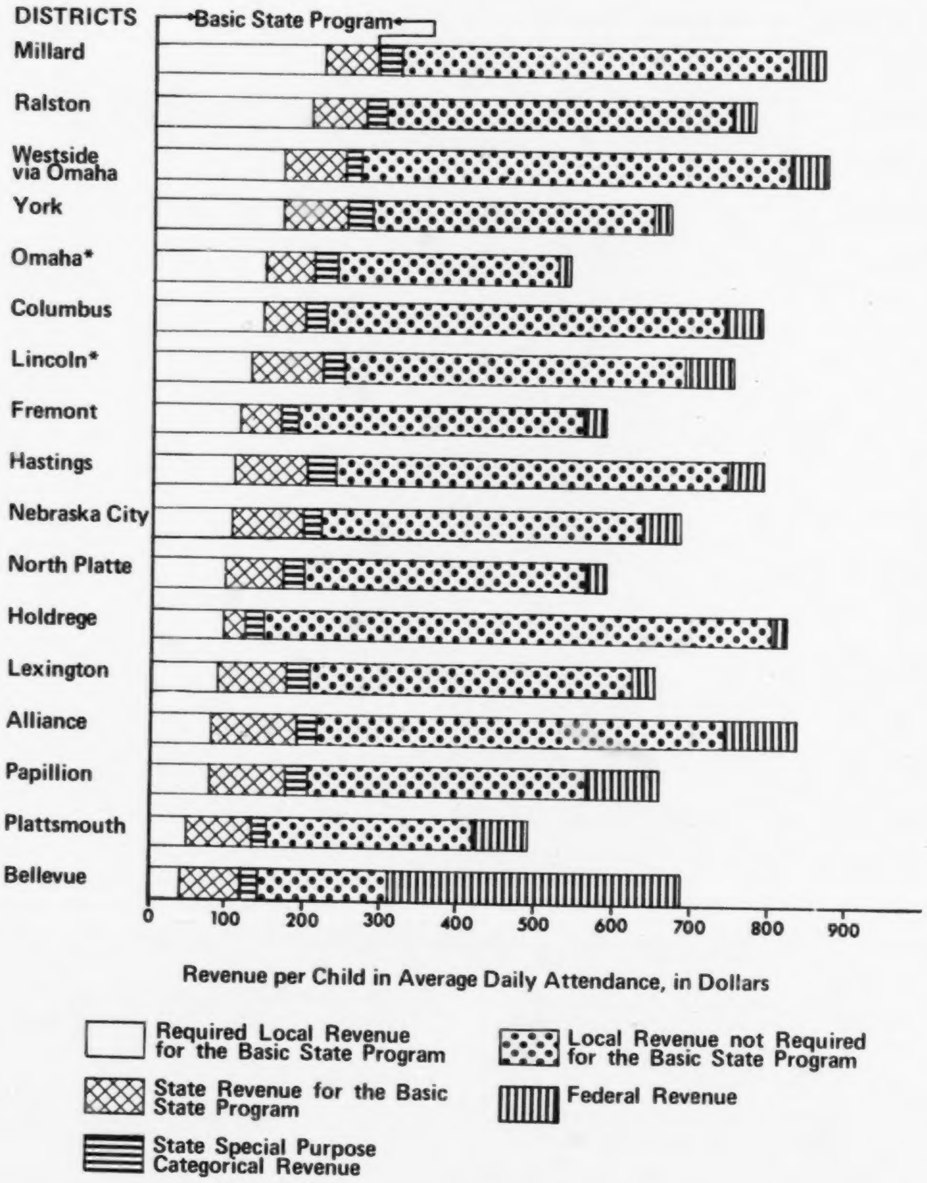
FIGURE 25. Revenues Available to Selected School Districts (Having 1500 and Above in ADA and Ranging from the Most to the Least Wealthy) in Missouri for 1968 - 1969



* The two largest school districts in terms of average daily enrollment.

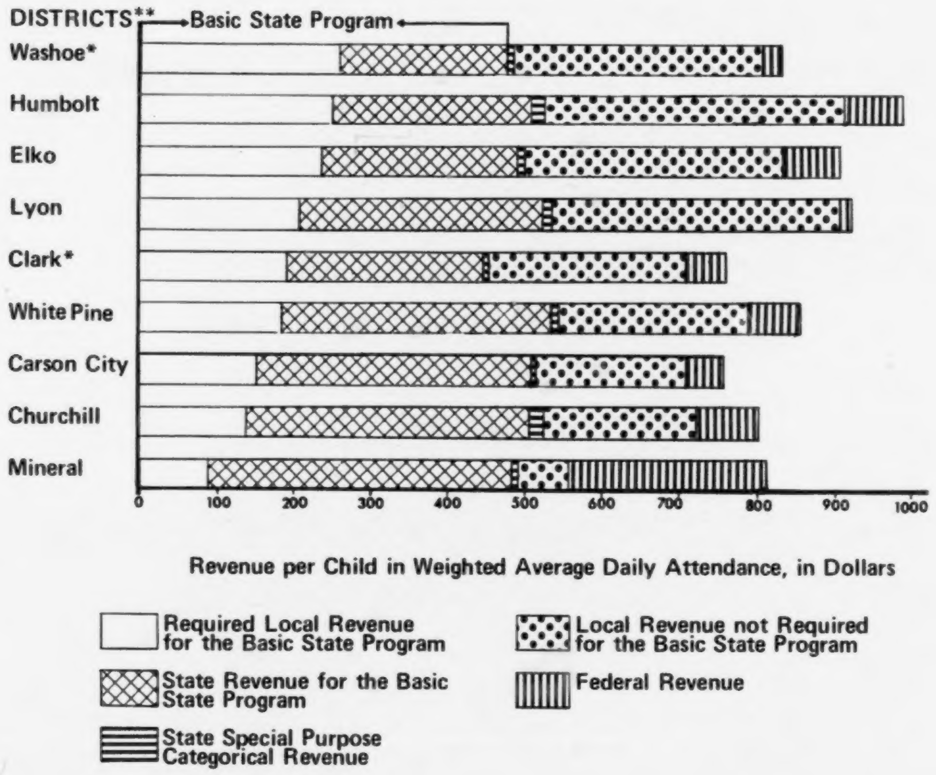
** There are no comprehensive school districts in the state of Montana. The school districts indicated here were formed by combining all of the elementary and secondary school districts on a county unit basis.

FIGURE 26. Revenues Available to Selected School Districts (Having 1500 and Above in ADE and Ranging from the Most to the Least Wealthy) in Montana for 1968 - 1969



* The two largest school districts in terms of average daily attendance.

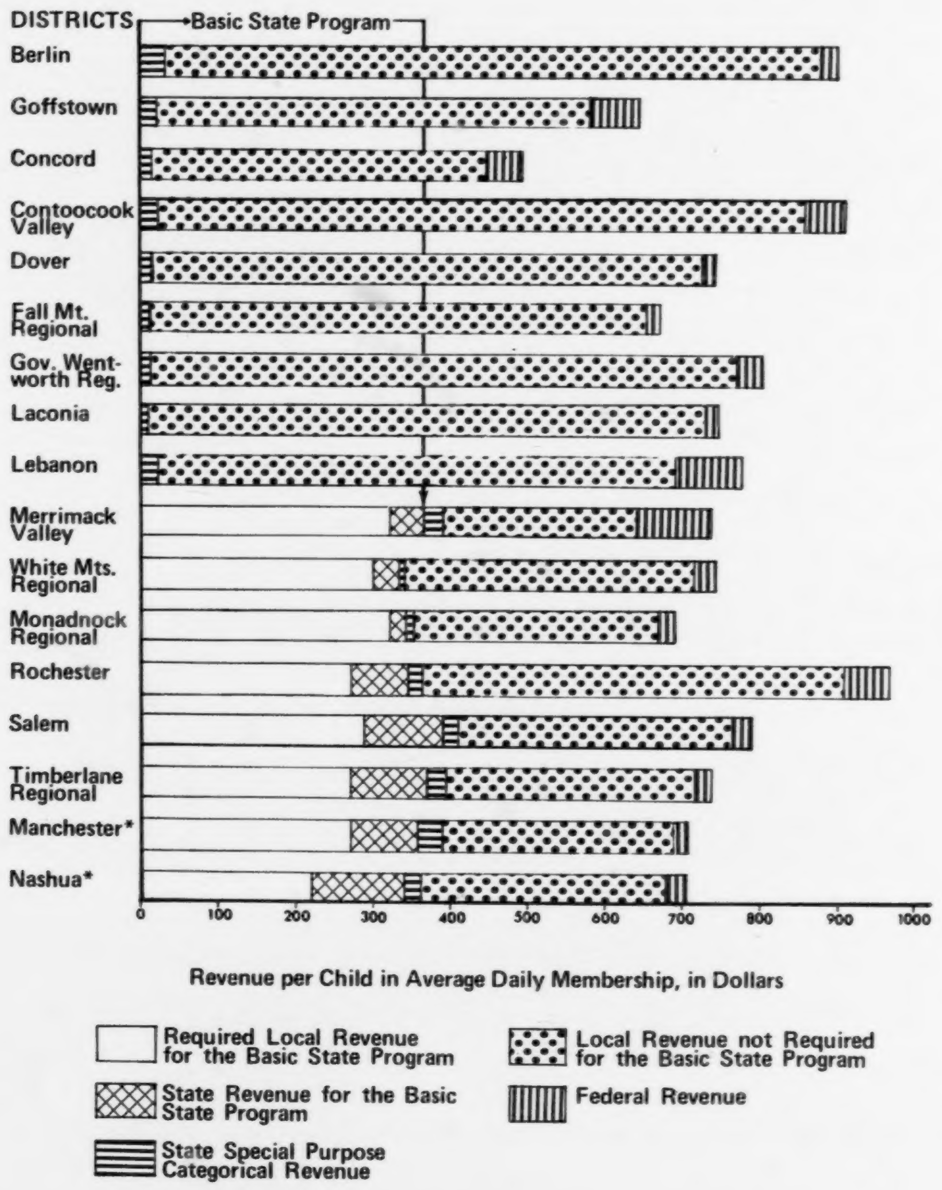
FIGURE 27. Revenues Available to Selected School Districts (Having 1500 and Above in ADA and Ranging from the Most to the Least Wealthy) in Nebraska for 1968 - 1969



* The two largest school districts in terms of weighted average daily attendance.

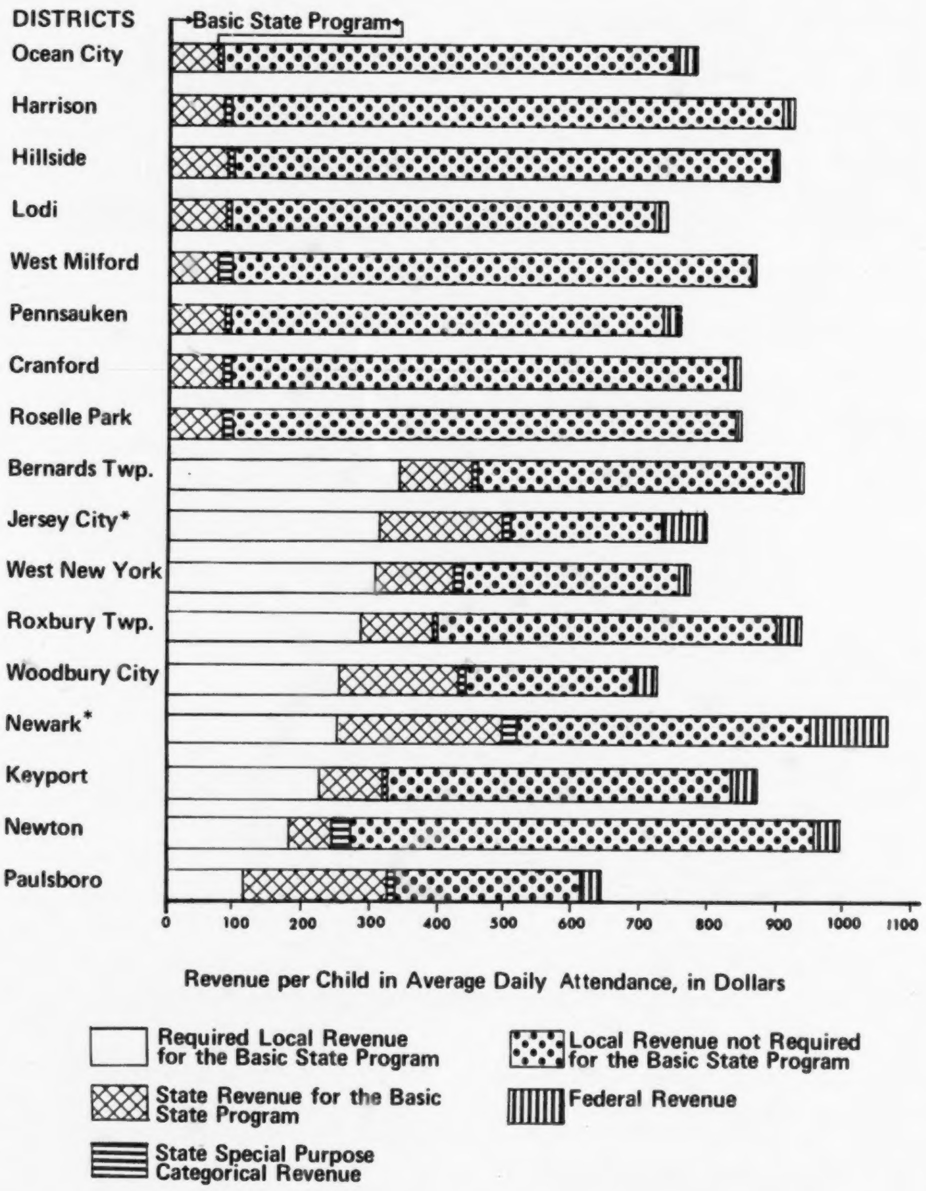
** There are only nine districts in Nevada having a W.A.D.A. equal to or greater than 1500. However, these districts account for more than 95 per cent of the total state W.A.D.A.

FIGURE 28. Revenues Available to Selected School Districts (Having 1500 and Above in W.A.D.A. and Ranging from the Most to the Least Wealthy) in Nevada for 1968 - 1969



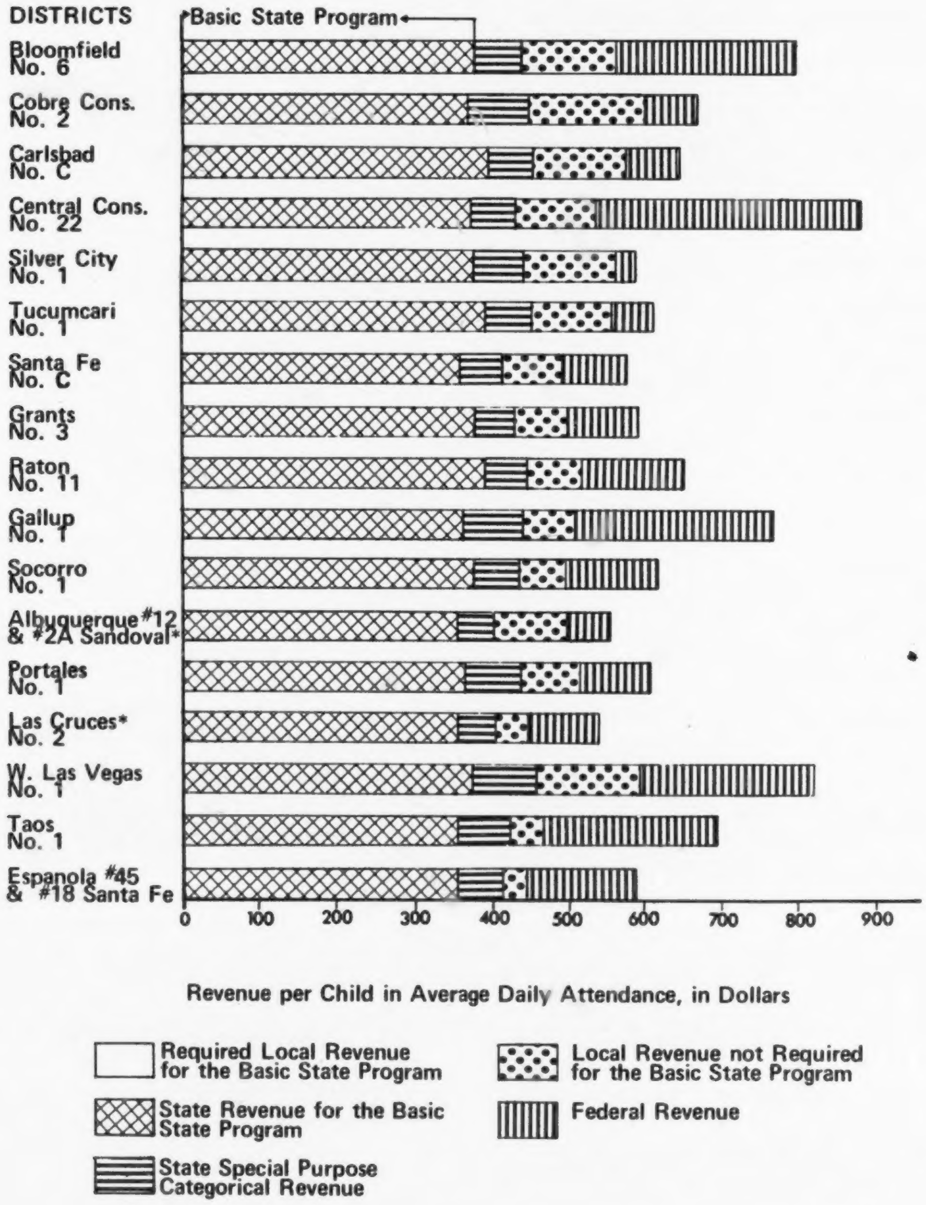
* The two largest school districts in terms of average daily membership.

FIGURE 29. Revenues Available to Selected School Districts (Having 1500 and Above in Average Daily Membership Ranging from the Most to the Least Wealthy) in New Hampshire for 1968 - 1969



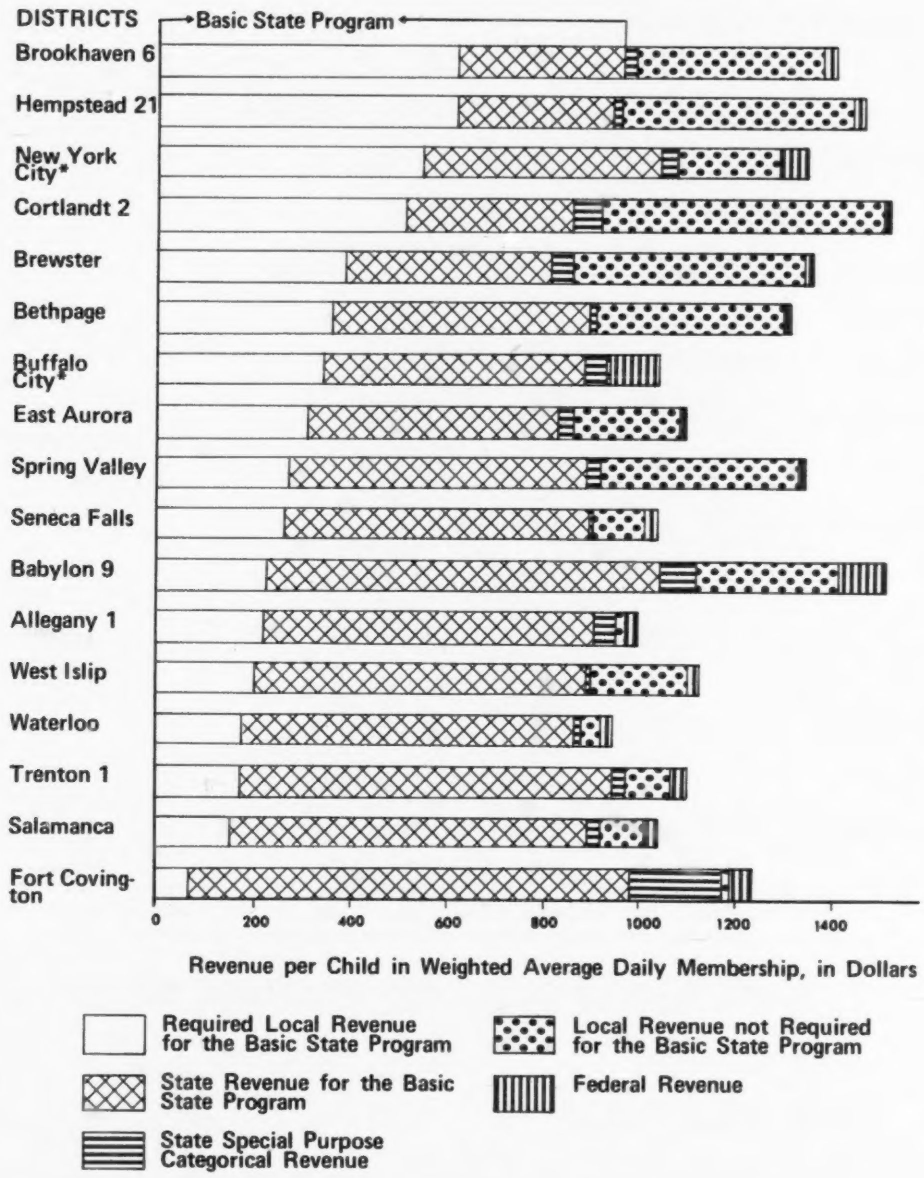
* The two largest school districts in terms of average daily attendance.

FIGURE 30. Revenues Available to Selected School Districts (Having 1500 and Above in ADA and Ranging from the Most to the Least Wealthy) in New Jersey for 1968 - 1969



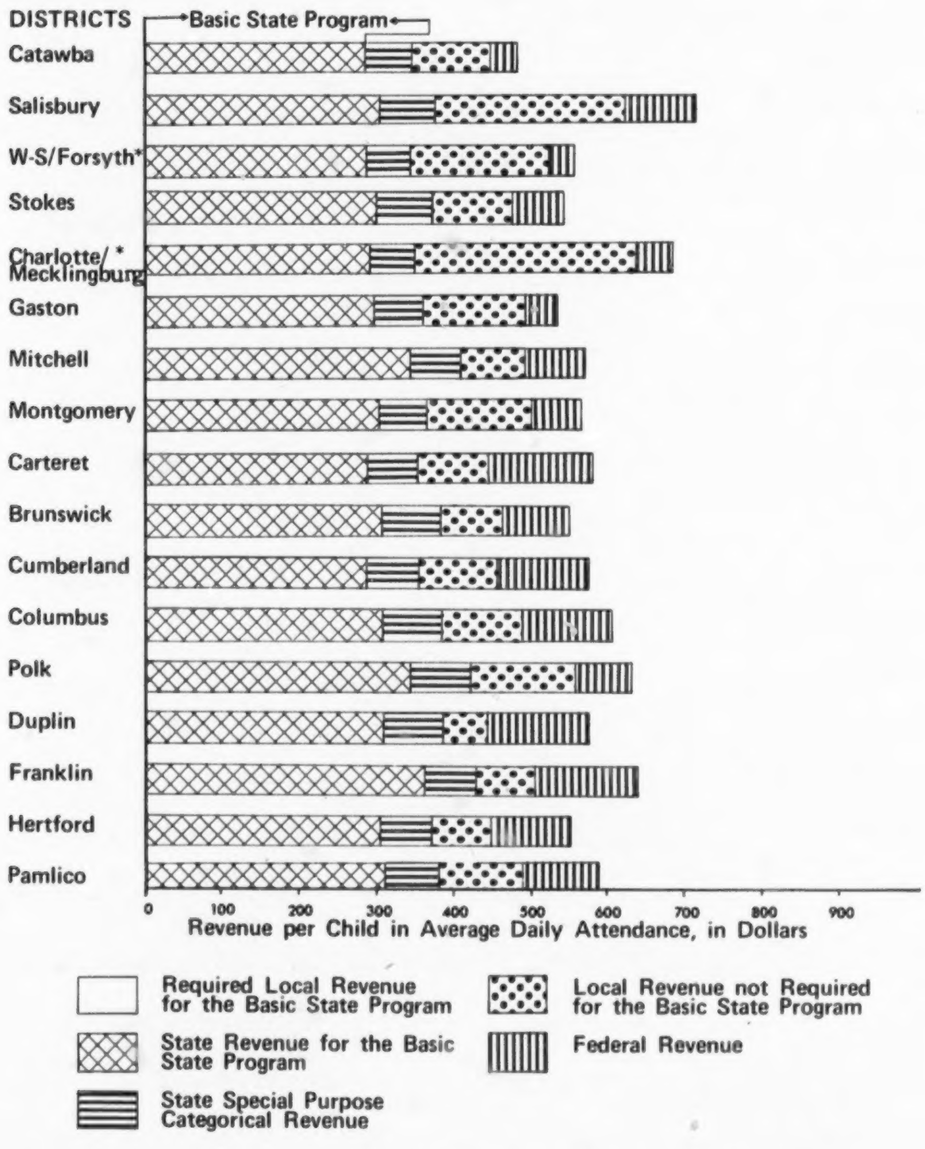
* The two largest school districts in terms of average daily attendance.

FIGURE 31. Revenues Available to Selected School Districts (Having 1500 and Above in ADA and Ranging from the Most to the Least Wealthy) in New Mexico for 1968 - 1969



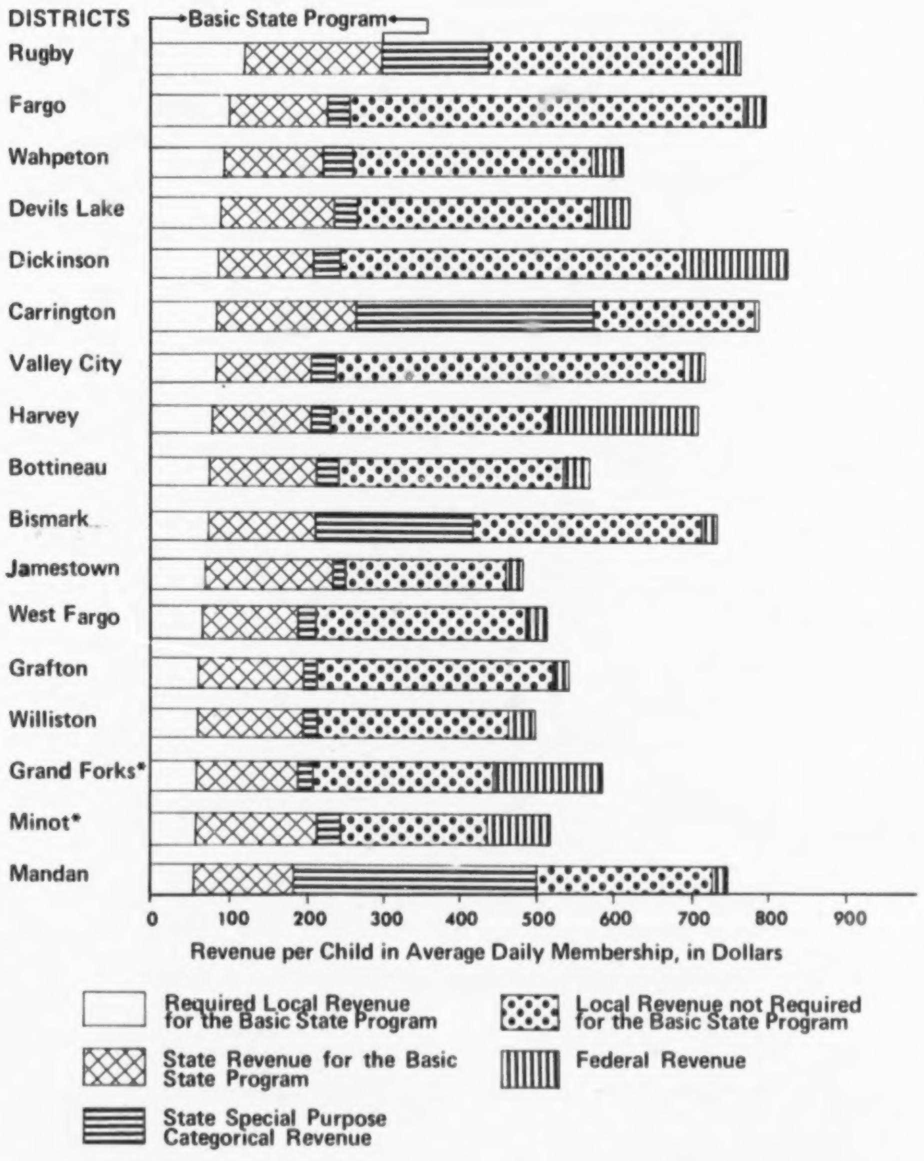
* The two largest school districts in terms of weighted average daily membership.

FIGURE 32. Revenues Available to Selected School Districts (Having 1500 and Above in W.A.D.M. and Ranging from the Most to the Least Wealthy) in New York for 1968 - 1969



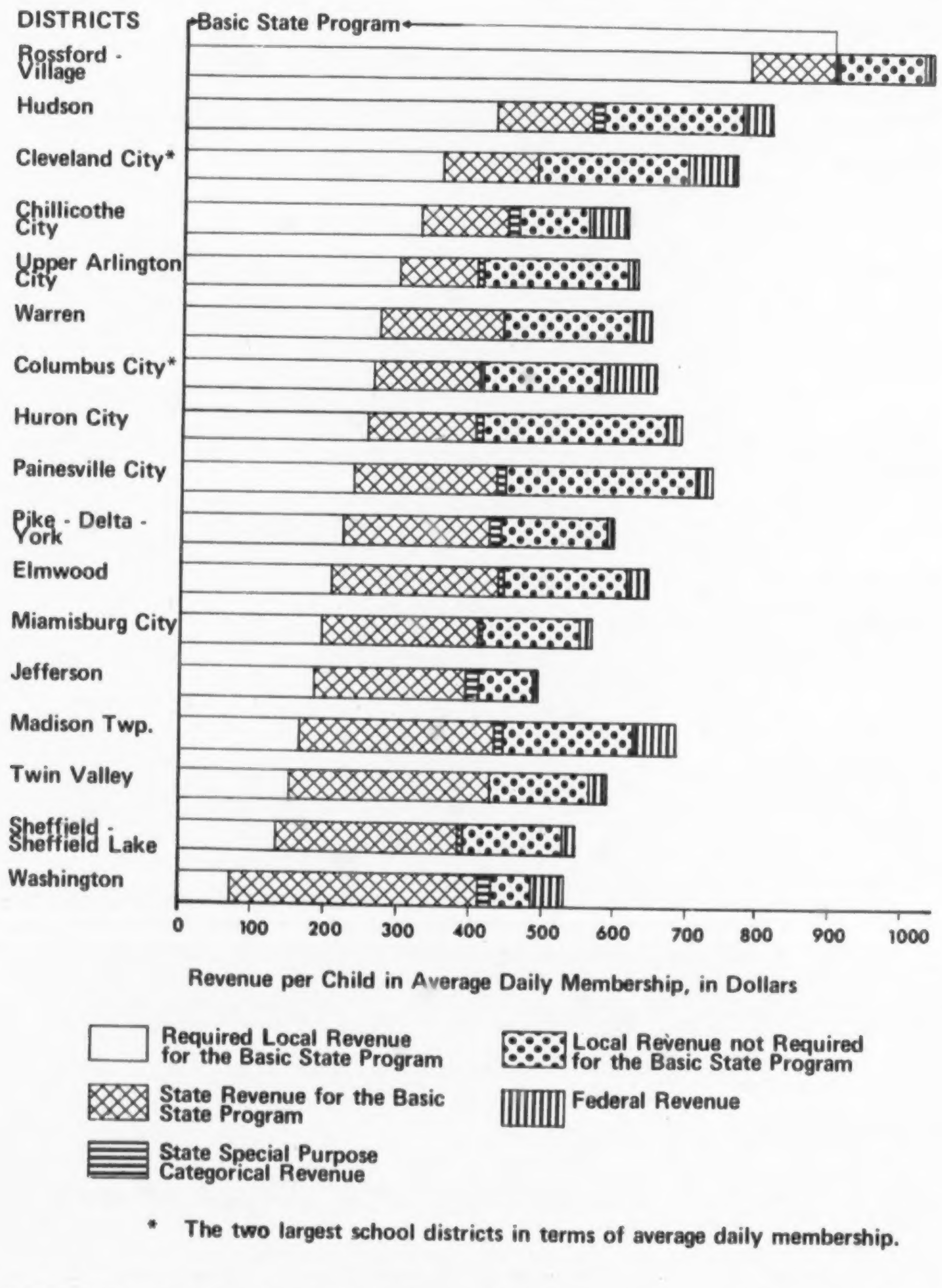
* The two largest school districts in terms of average daily attendance.

FIGURE 33. Revenues Available to Selected School Districts (Having 1500 and Above in ADA and Ranging from the Most to the Least Wealthy) in North Carolina for 1968 - 1969



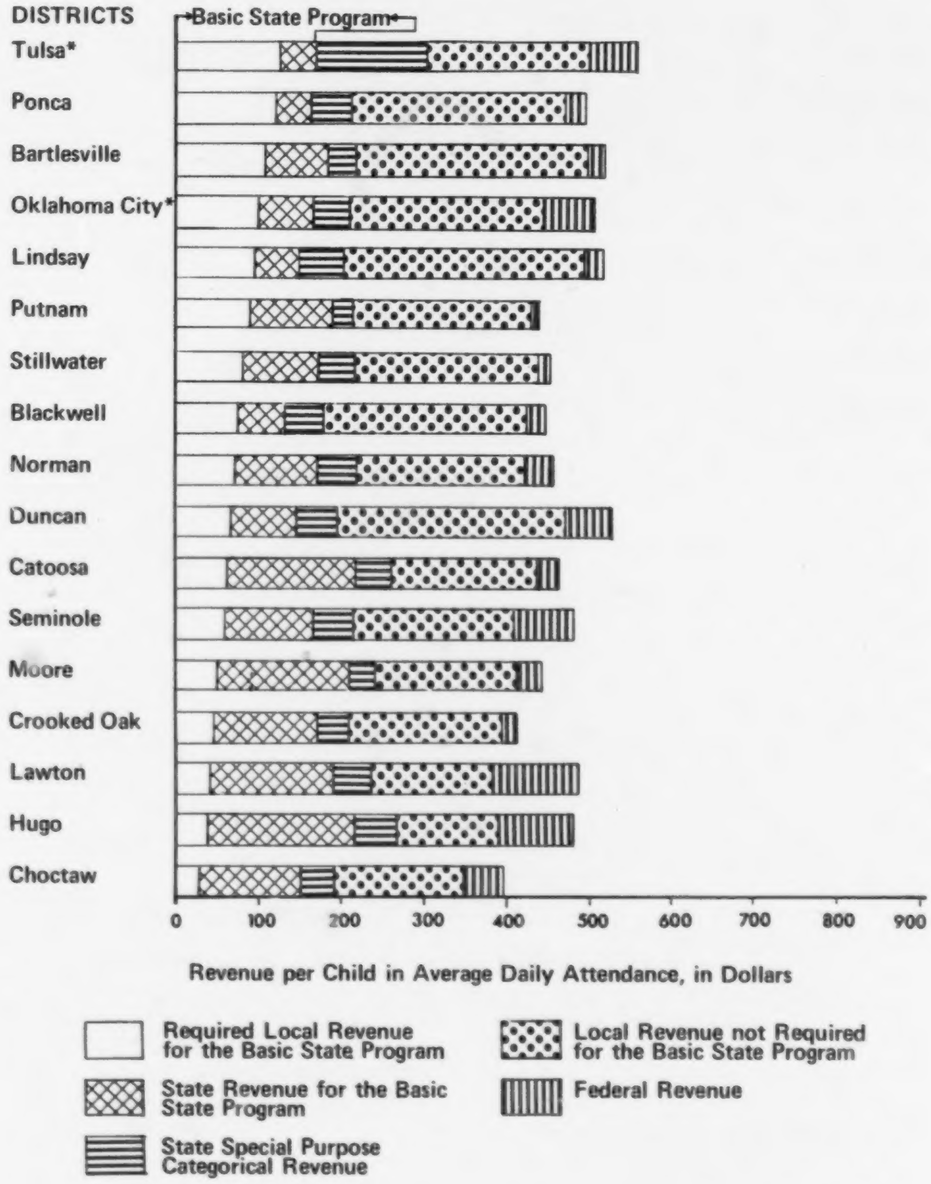
* The two largest school districts in terms of average daily membership.

FIGURE 34. Revenues Available to Selected School Districts (Having 1500 and Above in ADM and Ranging from the Most to the Least Wealthy) in North Dakota for 1968 - 1969



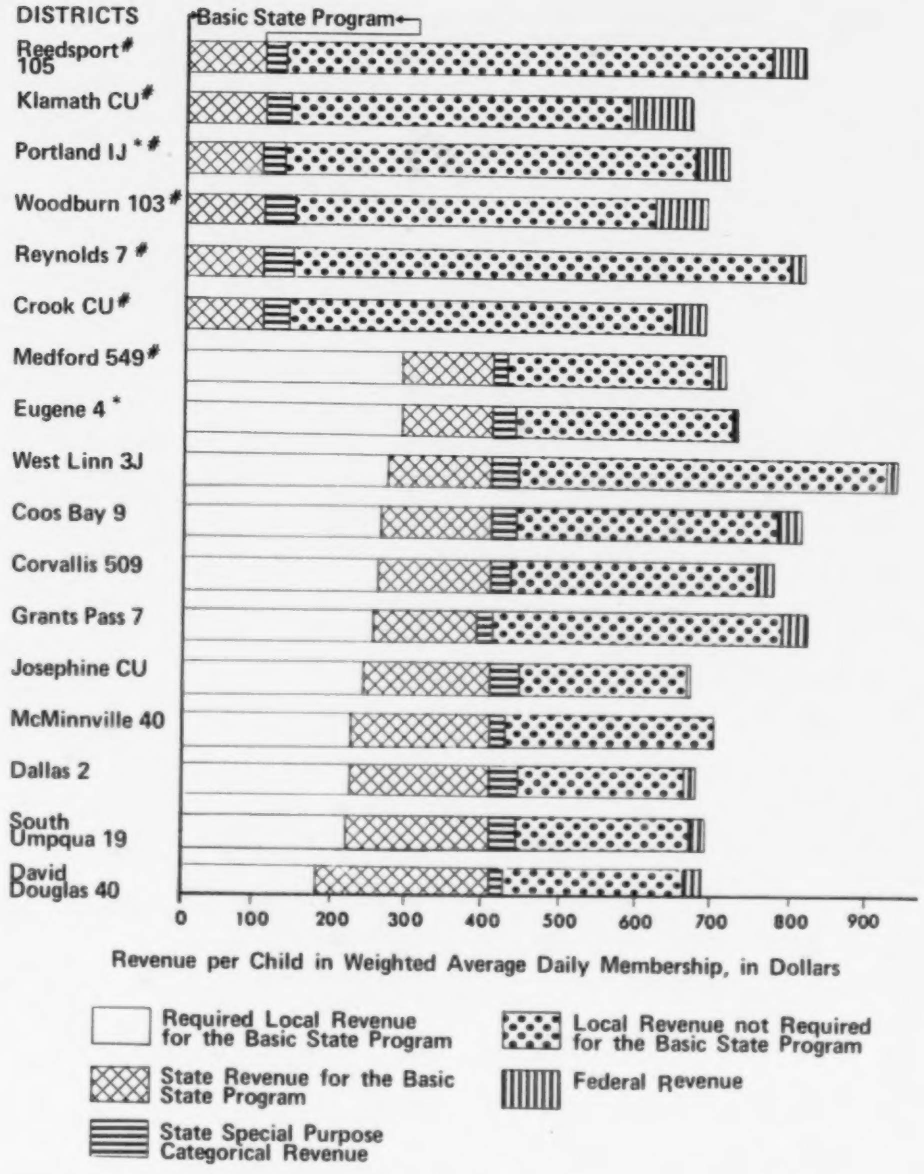
* The two largest school districts in terms of average daily membership.

FIGURE 35. Revenues Available to Selected School Districts (Having 1500 and Above in Average Daily Membership and Ranging from the Most to the Least Wealthy) in Ohio for 1968 - 1969



* The two largest school districts in terms of average daily attendance.

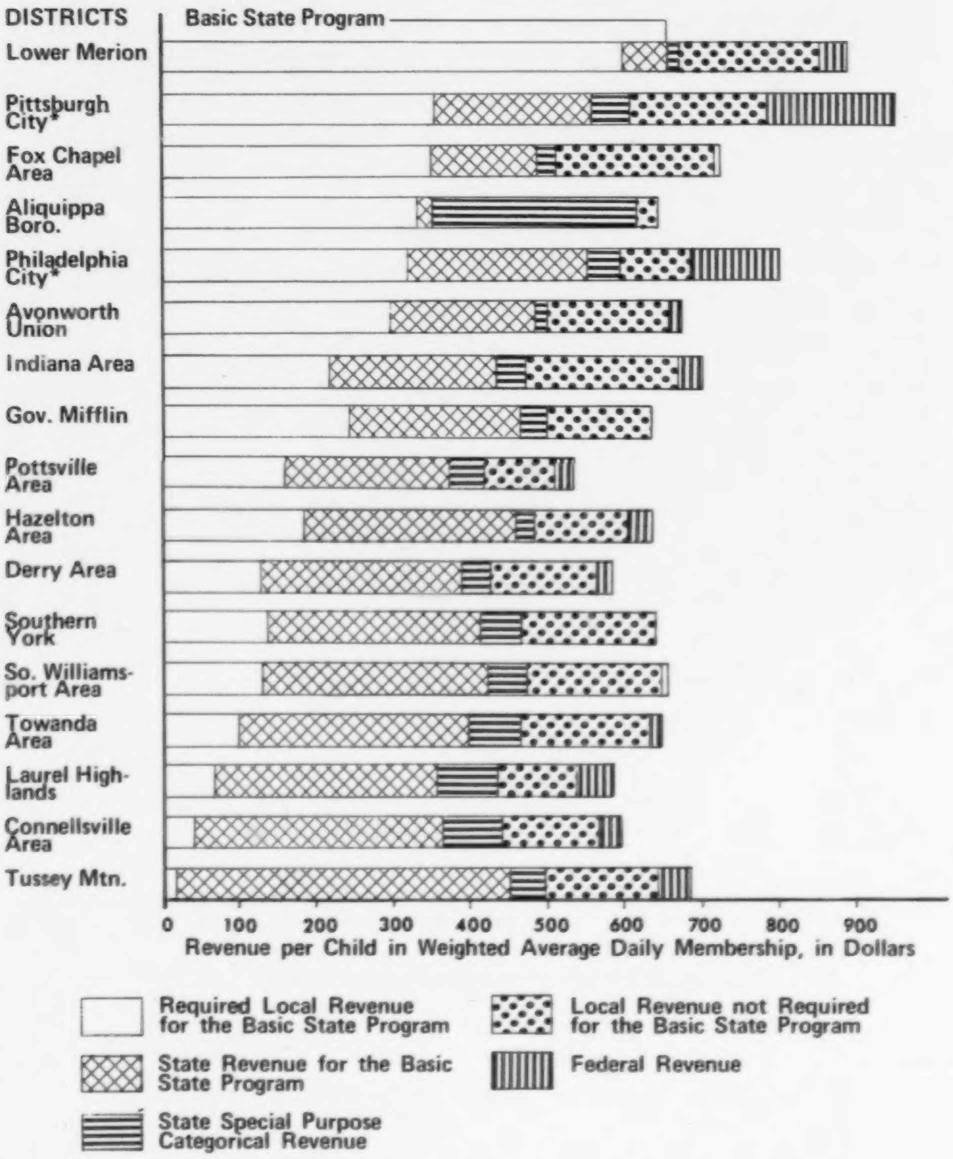
FIGURE 36. Revenues Available to Selected School Districts (Having 1500 and Above in ADA and Ranging from the Most to the Least Wealthy) in Oklahoma for 1968 - 1969



* The two largest school districts in terms of weighted average daily membership.

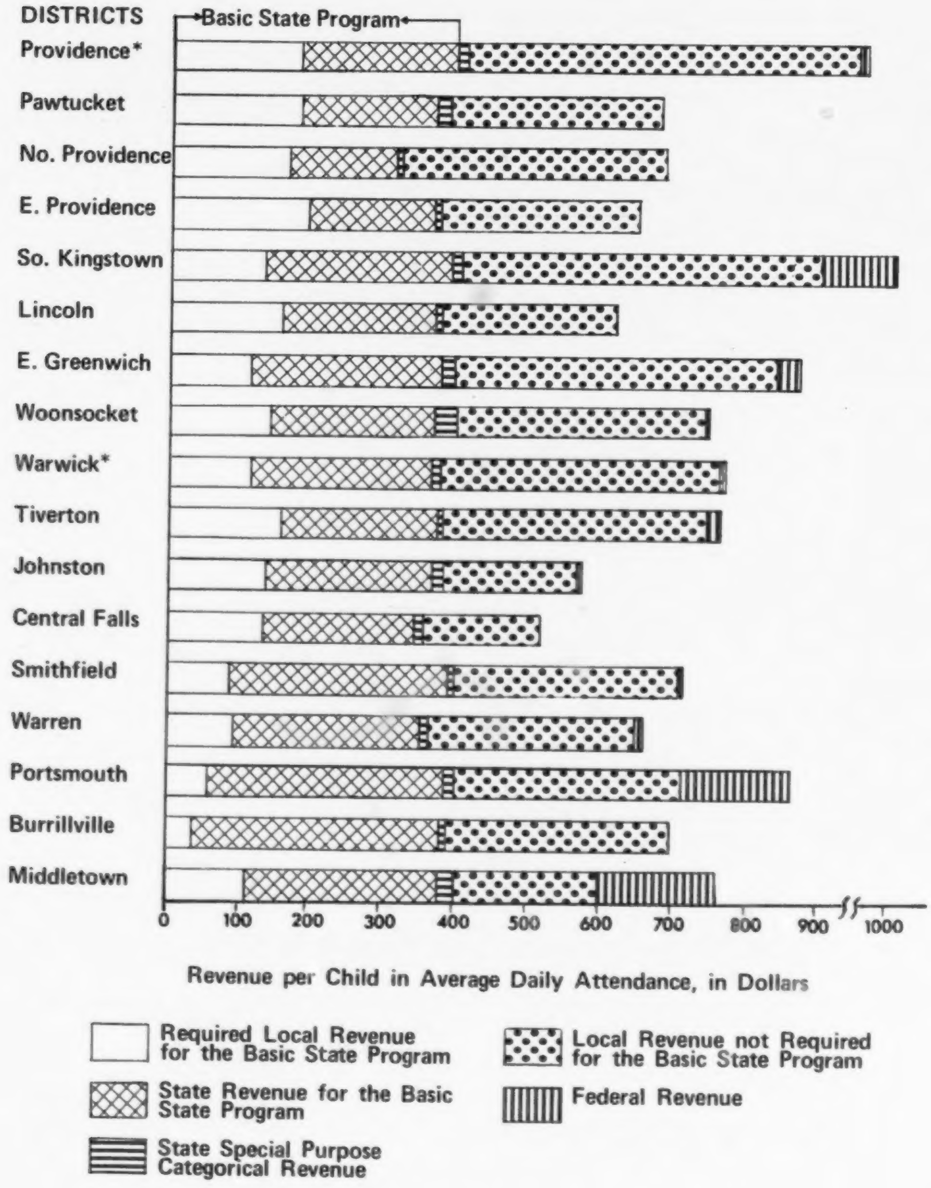
# These districts did not participate in the equalization portion of the Basic State Program and did not have a required local revenue.

FIGURE 37. Revenues Available to Selected School Districts (Having 1500 and Above in W.A.D.M. and Ranging from the Most to the Least Wealthy) in Oregon for 1968 - 1969



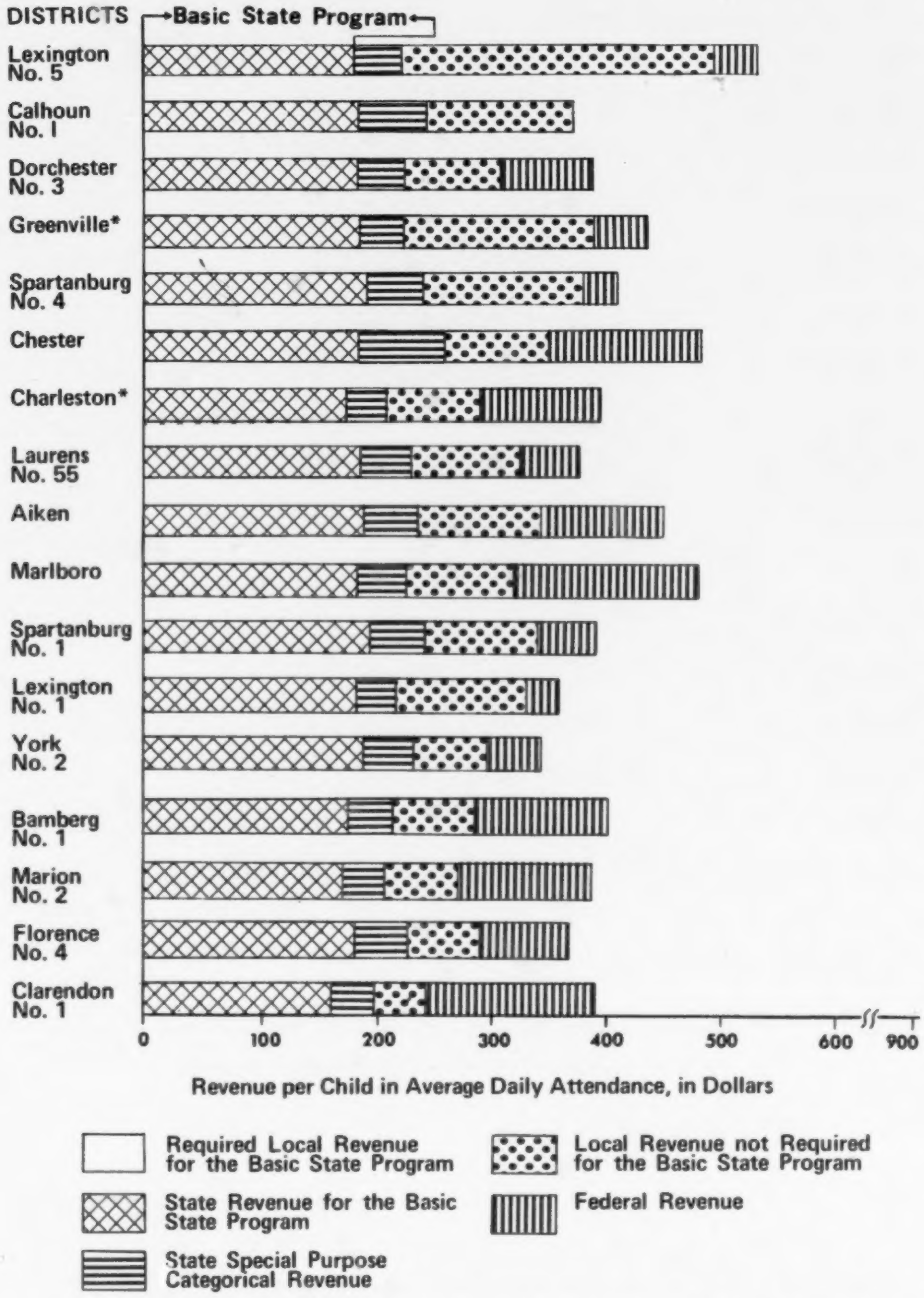
* The two largest school districts in terms of weighted average daily membership.

FIGURE 38. Revenues Available to Selected School Districts (having 1500 and Above in W.A.D.M. and Ranging from the Most to the Least Wealthy) in Pennsylvania for 1968 - 1969



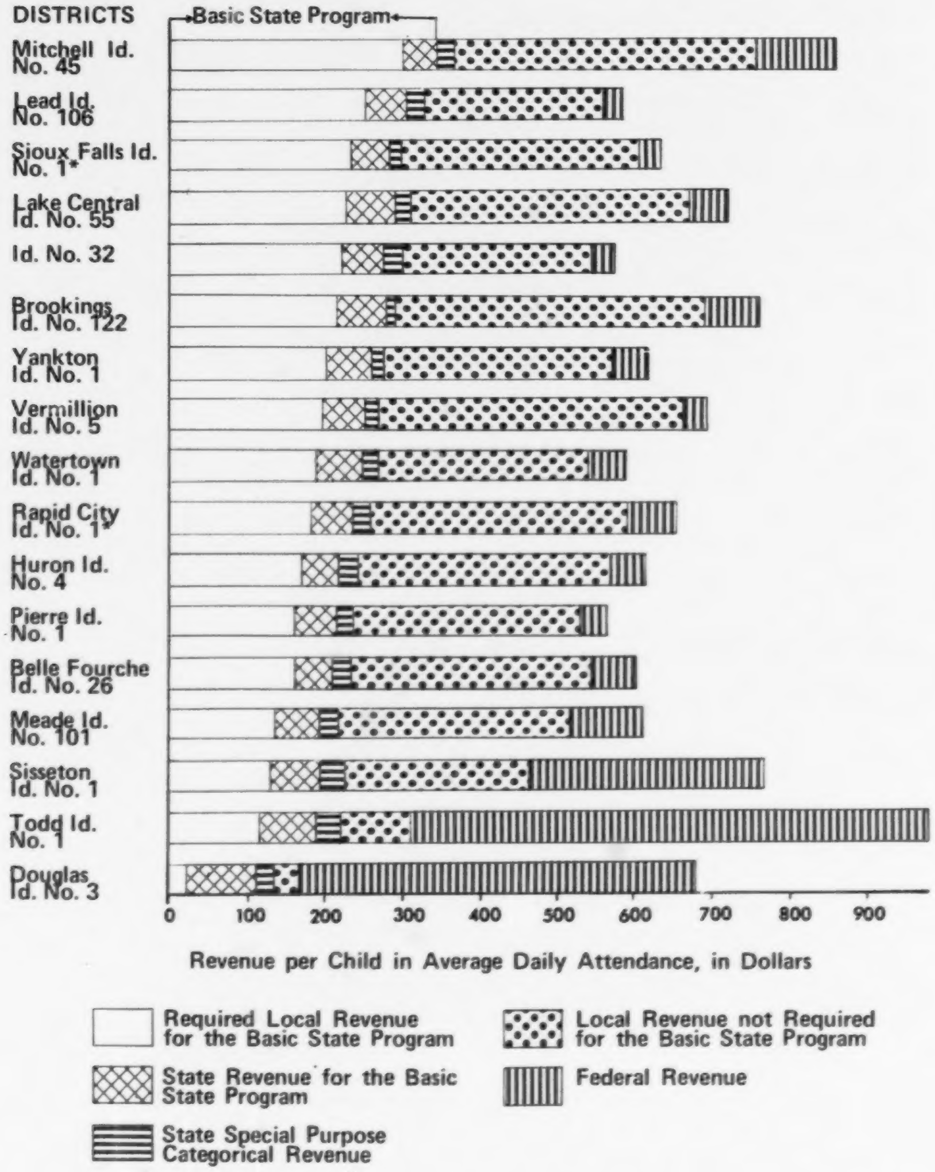
* The two largest school districts in terms of average daily attendance.

FIGURE 39. Revenues Available to Selected School Districts (Having 1500 and Above in ADA and Ranging from the Most to the Least Wealthy) in Rhode Island for 1968 - 1969



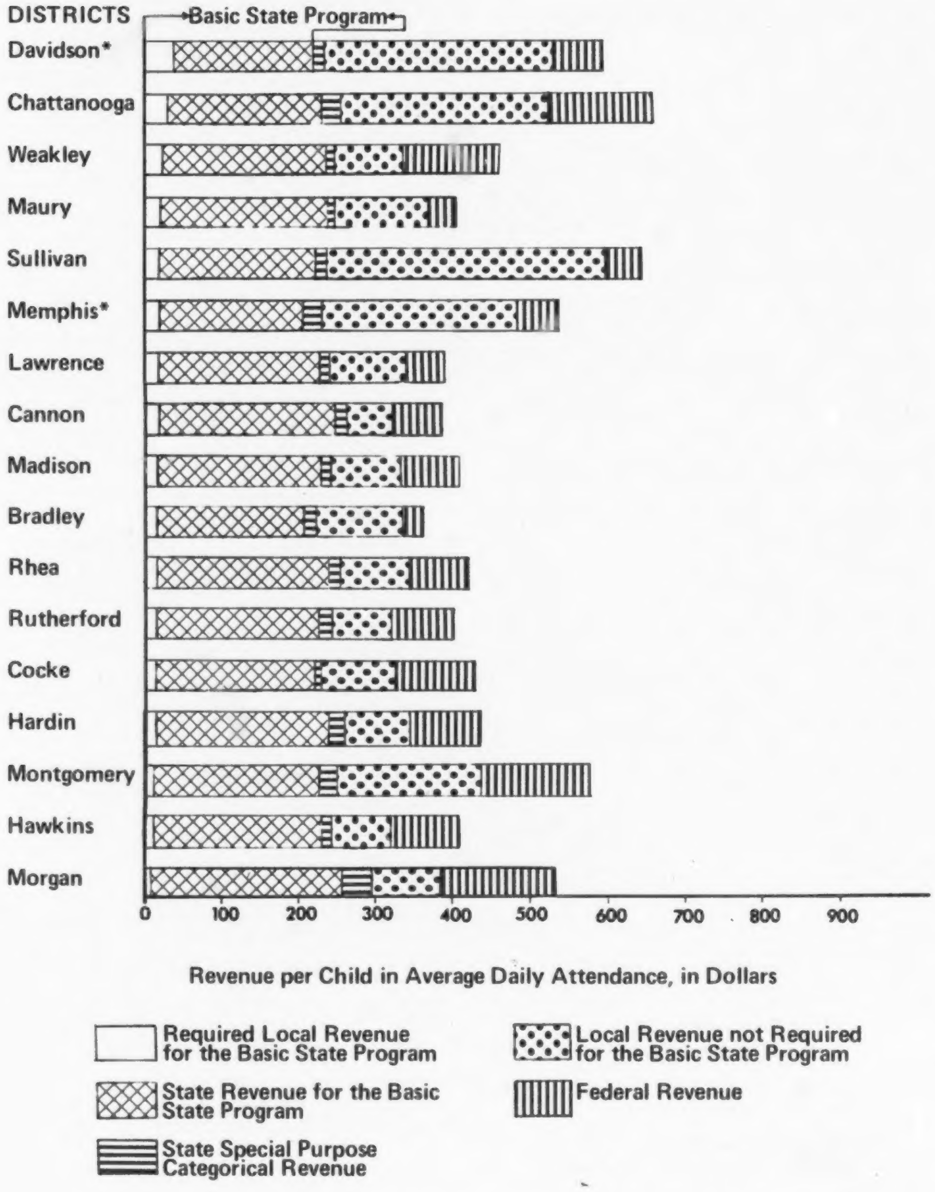
* The two largest school districts in terms of average daily attendance.

FIGURE 40. Revenues Available to Selected School Districts (Having 1500 and Above in ADA and Ranging from the Most to the Least Wealthy) in South Carolina for 1968 - 1969



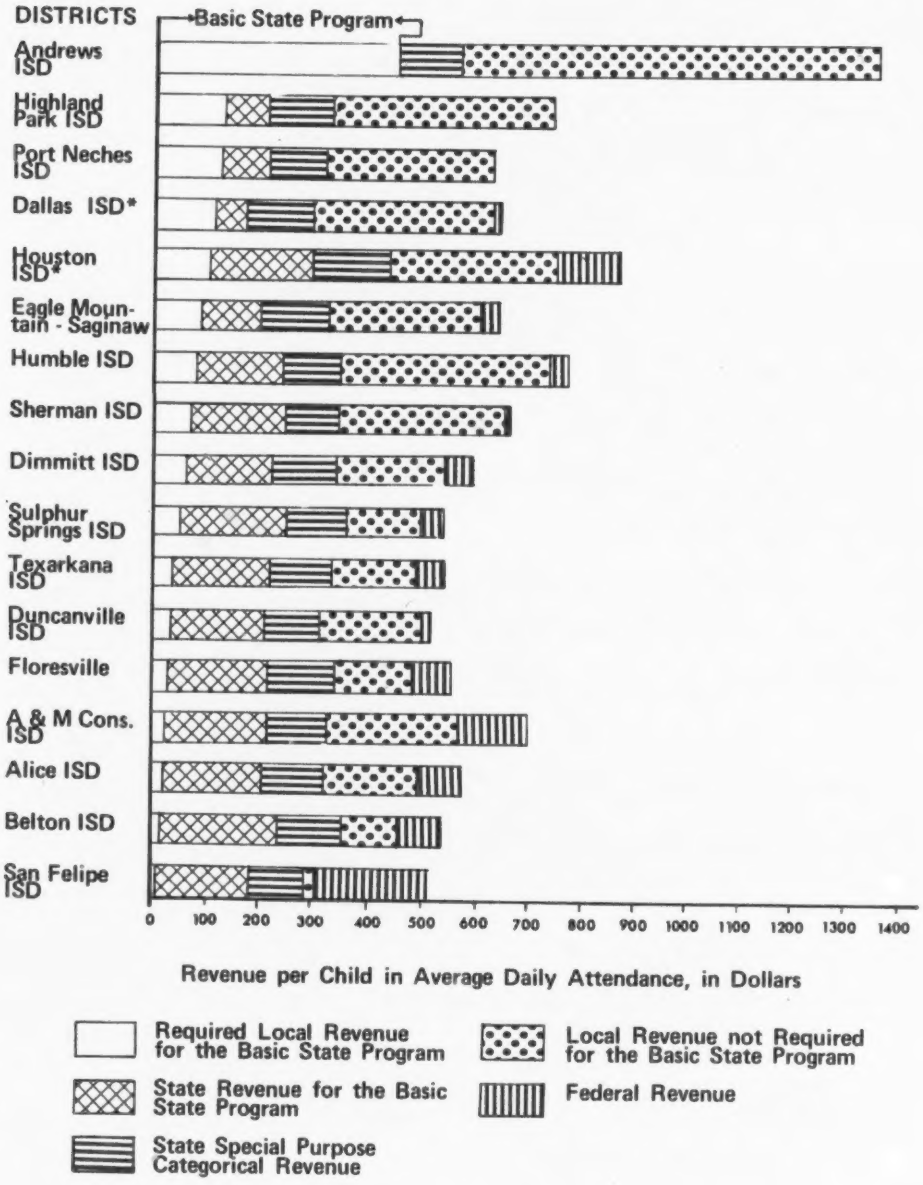
* The two largest school districts in terms of average daily attendance.

FIGURE 41. Revenues Available to Selected School Districts (Having 1300 and Above in ADA and Ranging from the Most to the Least Wealthy) in South Dakota for 1968 - 1969



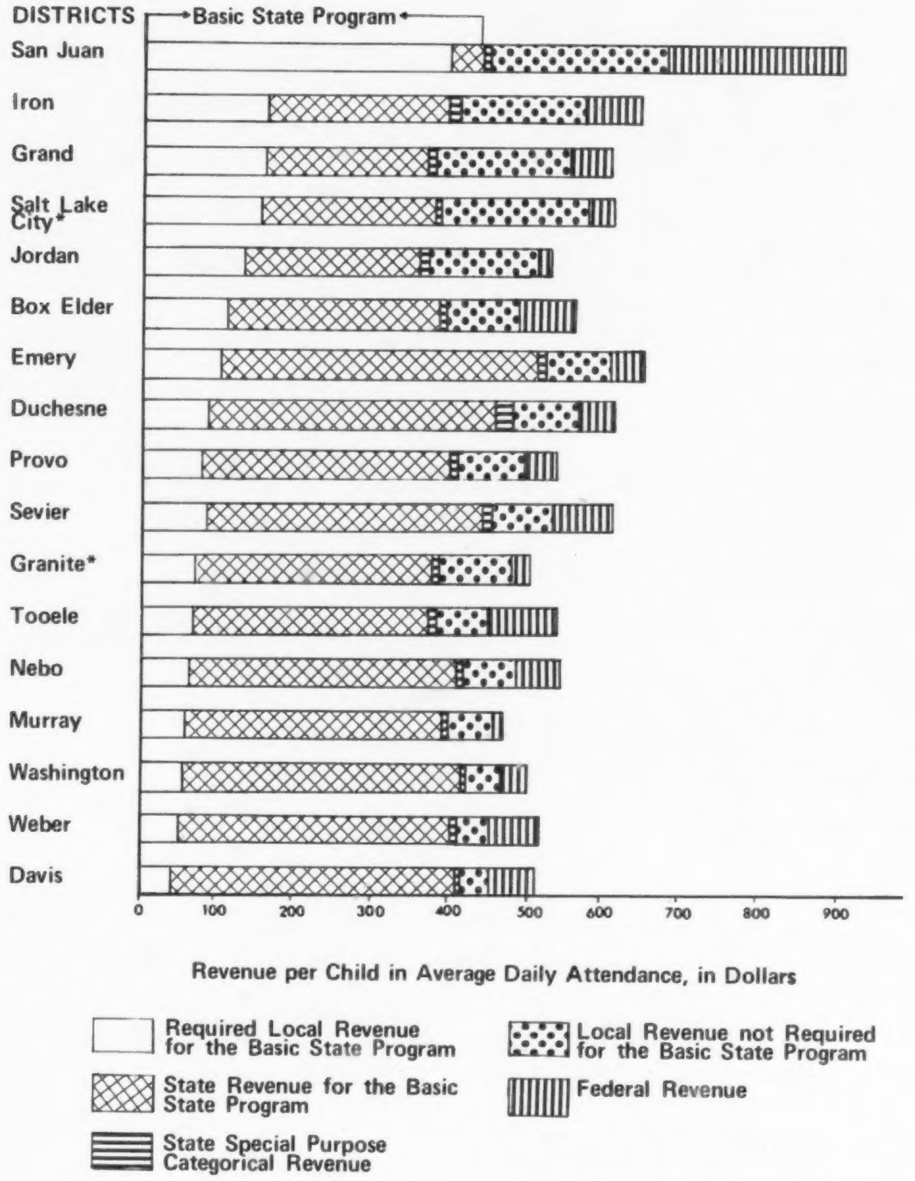
* The two largest school districts in terms of average daily attendance.

FIGURE 42. Revenues Available to Selected School Districts (Having 1500 and Above in ADA and Ranging from the Most to the Least Wealthy) in Tennessee for 1968 - 1969



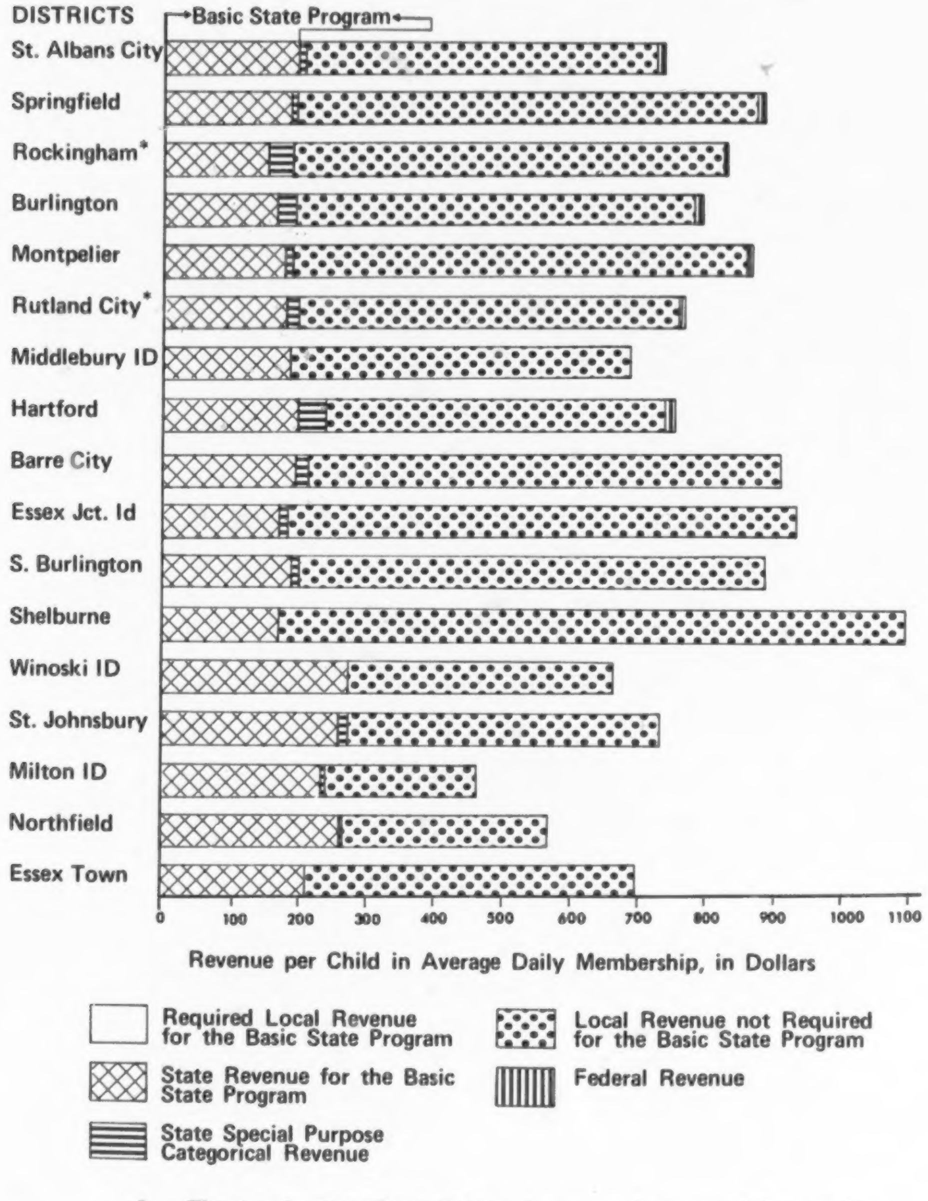
* The two largest School districts in terms of average daily attendance.

FIGURE 43. Revenues Available to Selected School Districts (Having 1500 and Above in ADA and Ranging from the Most to the Least Wealthy) in Texas for 1968 - 1969



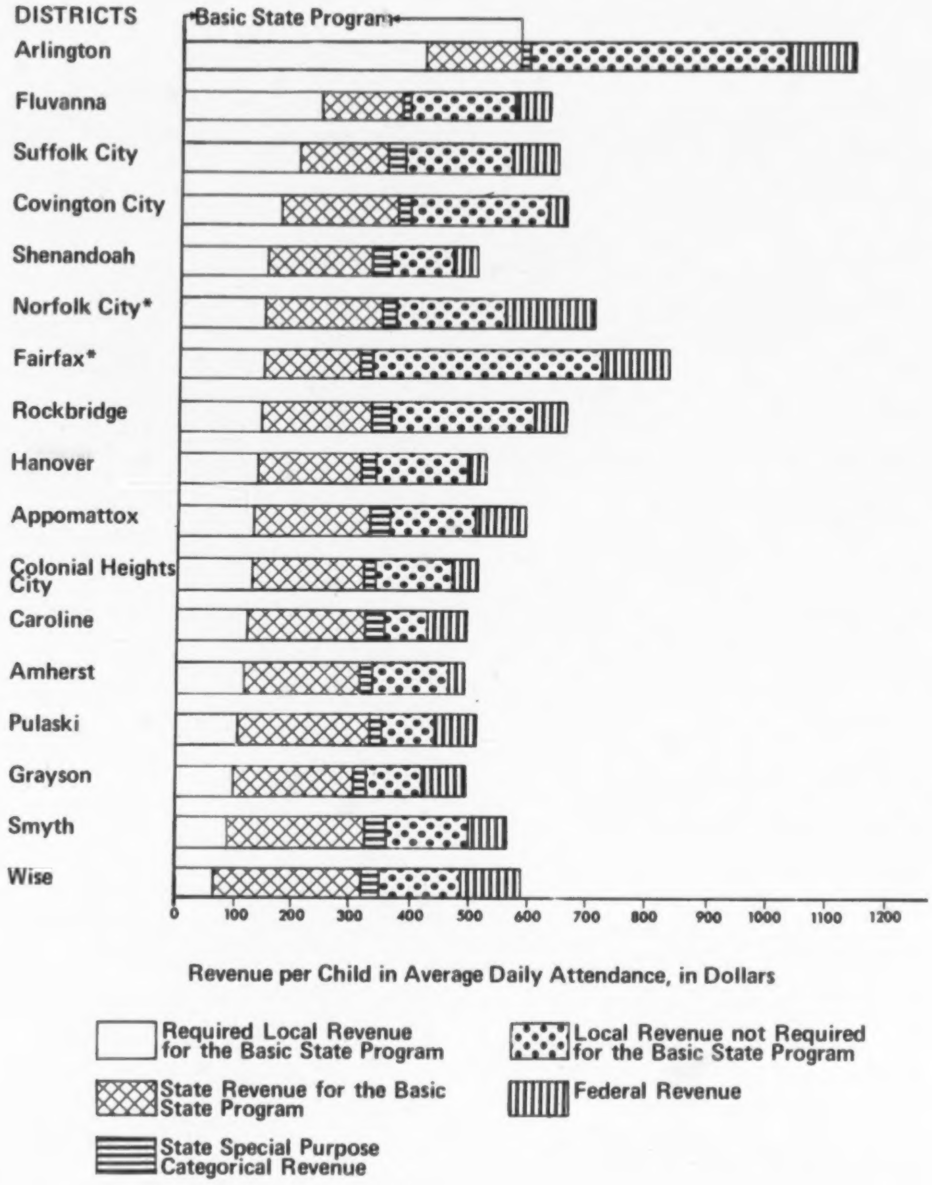
* The two largest school districts in terms of average daily attendance.

FIGURE 44. Revenues Available to Selected School Districts (Having 1500 and Above in ADA and Ranging from the Most to the Least Wealthy) in Utah for 1968 - 1969



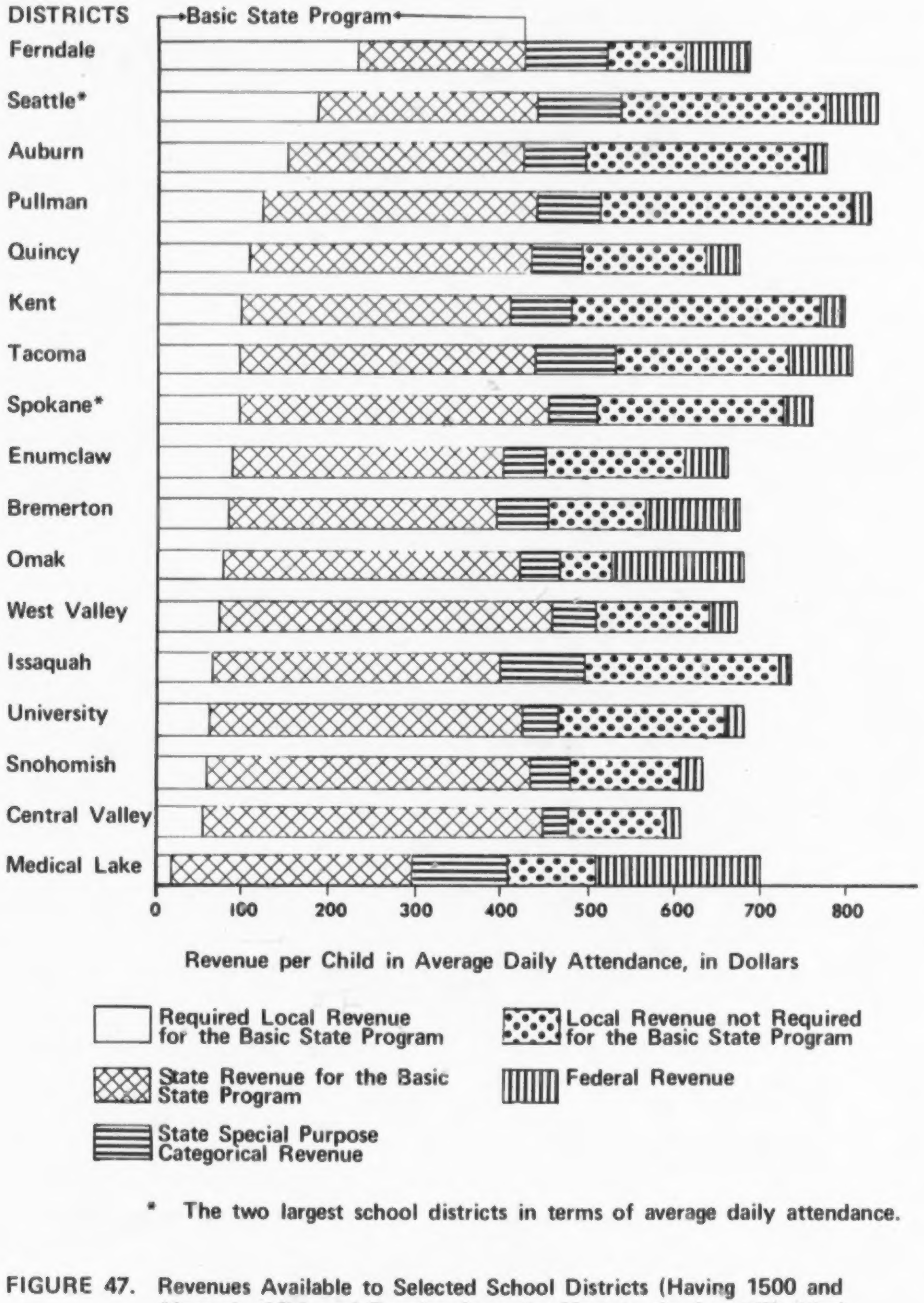
* The two largest school districts in terms of average daily membership.

FIGURE 45. Revenues Available to Selected School Districts (Having 1500 and Above in ADM and Ranging from the Most to the Least Wealthy) in Vermont for 1968 - 1969



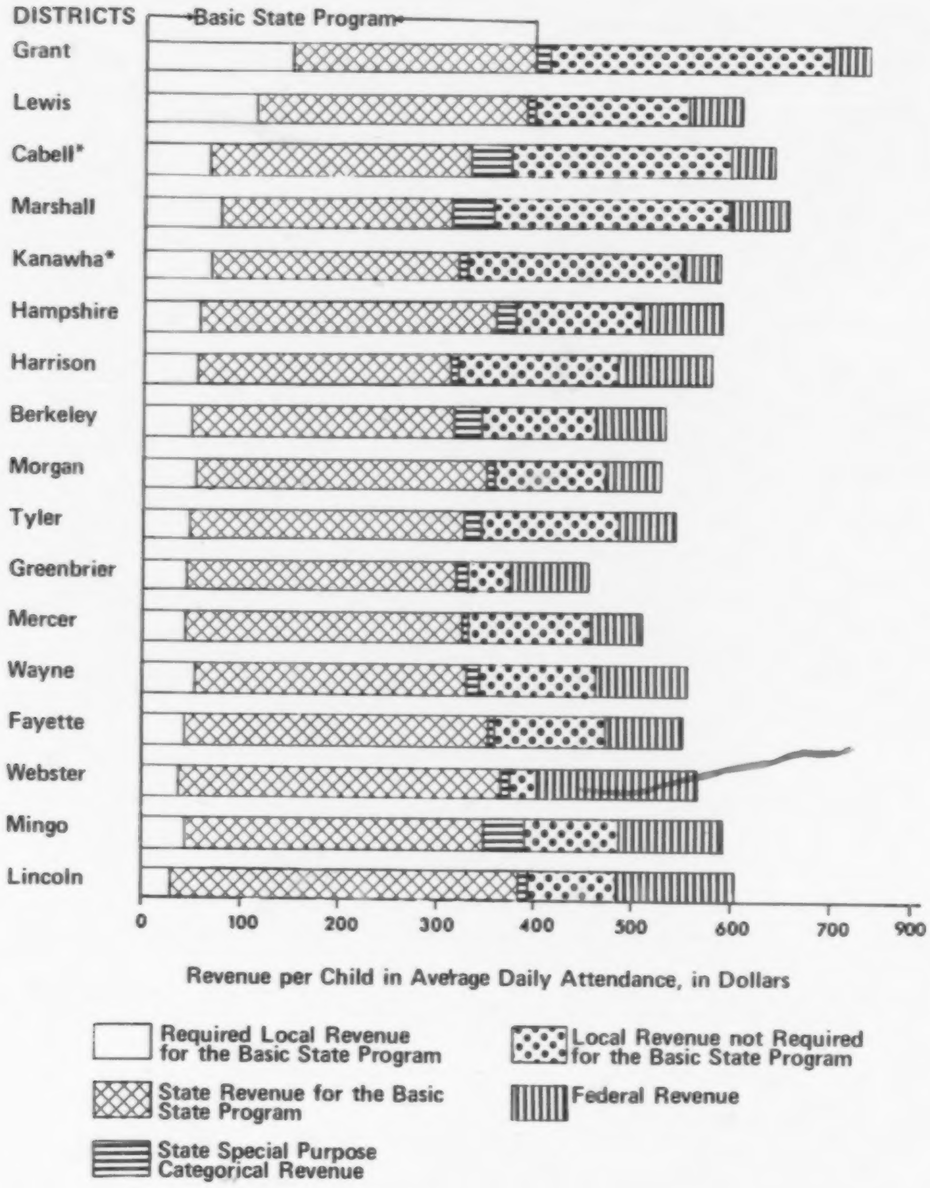
* The two largest school districts in terms of average daily attendance.

FIGURE 46. Revenues Available to Selected School Districts (Having 1500 and Above in ADA and Ranging from the Most to the Least Wealthy) in Virginia for 1968 - 1969



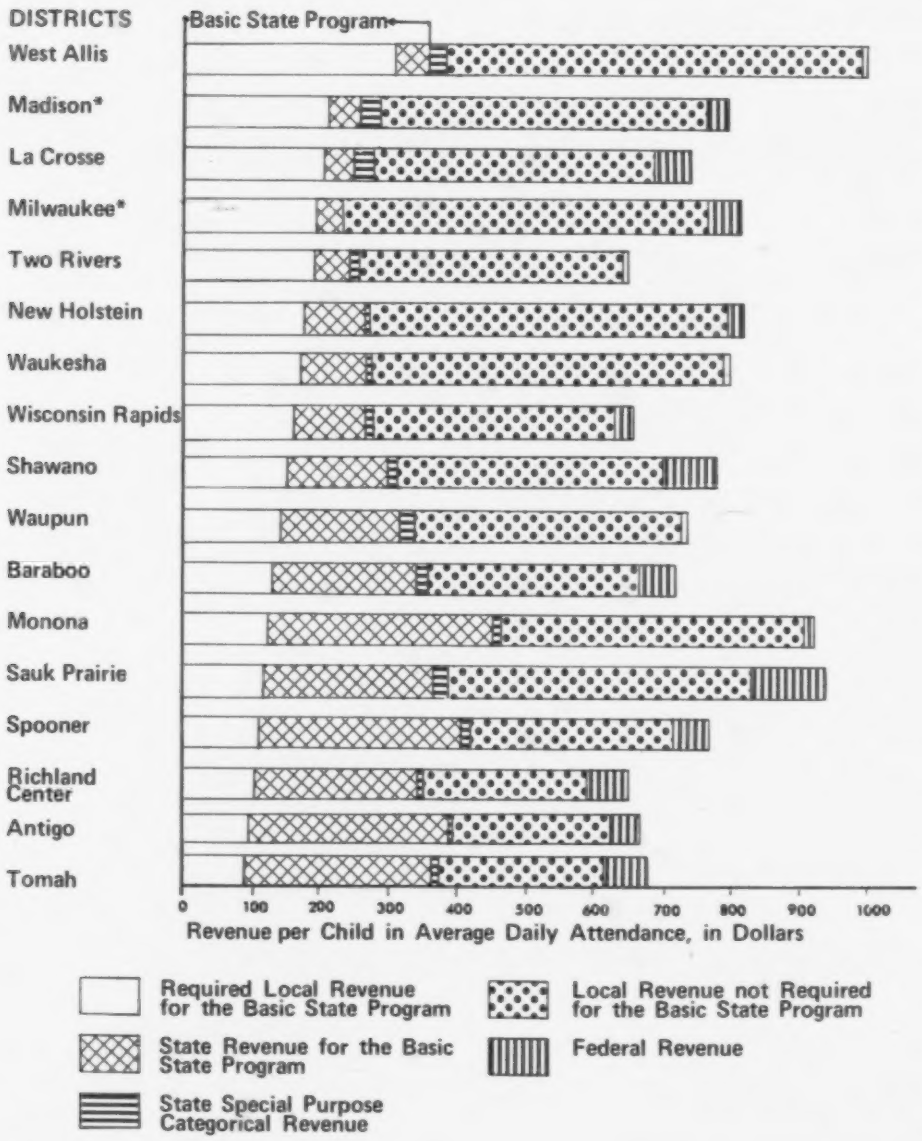
* The two largest school districts in terms of average daily attendance.

FIGURE 47. Revenues Available to Selected School Districts (Having 1500 and Above in ADA and Ranging from the Most to the Least Wealthy) in Washington for 1968 - 1969



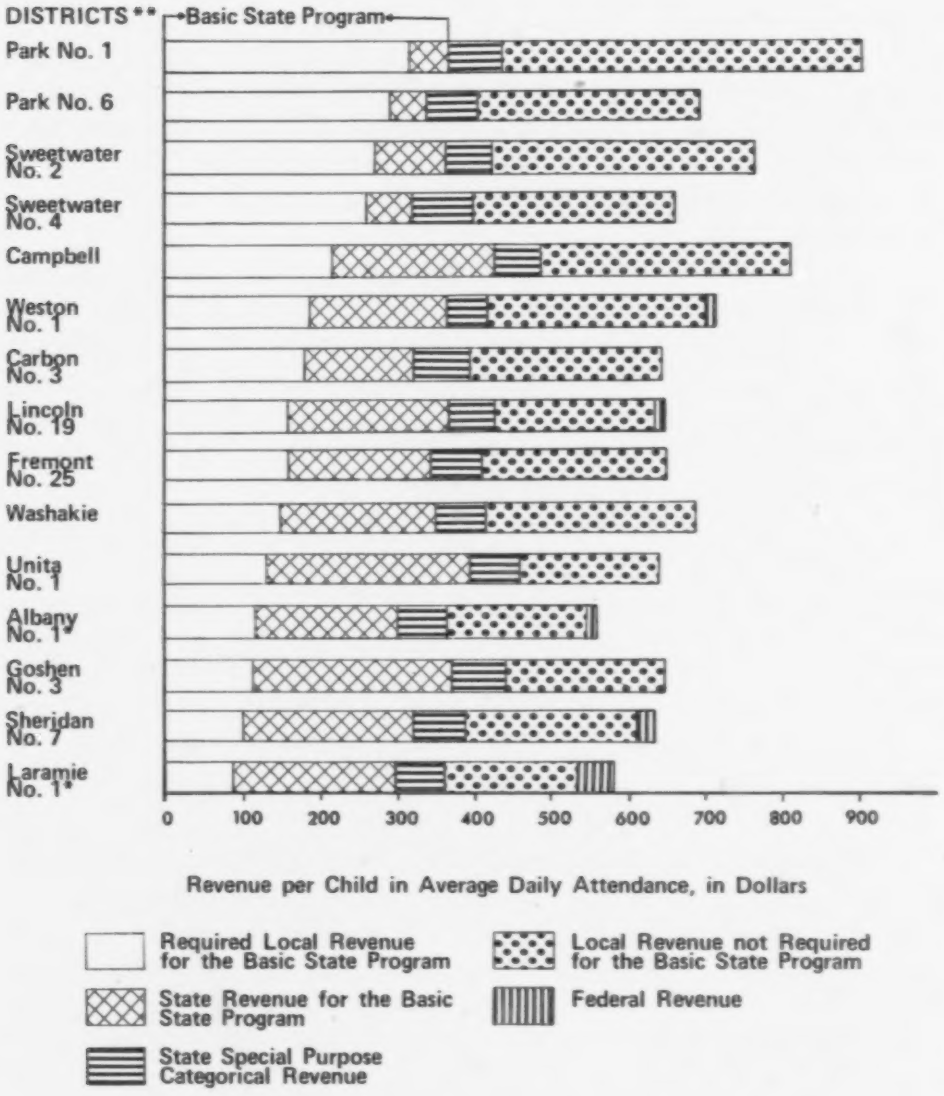
* The two largest school districts in terms of average daily attendance.

FIGURE 48. Revenues Available to Selected School Districts (Having 1500 and Above in ADA and Ranging from the Most to the Least Wealthy) in West Virginia for 1968 - 1969



* The two largest school districts in terms of average daily attendance.

FIGURE 49. Revenues Available to Selected School Districts (Having 1500 and Above in ADA and Ranging from the Most to the Least Wealthy) in Wisconsin for 1968 - 1969



* The two largest school districts in terms of average daily attendance.

** There are only 15 districts in the State of Wyoming which have an ADA of 1200 of more. However, these districts represent more than 50% of the total state ADA.

FIGURE 50. Revenues Available to Selected School Districts (Having 1500 and Above in ADA and Ranging from the Most to the Least Wealthy) in Wyoming for 1968 - 1969

Alabama on paper uses the Strayer-Haig-Mort equalization formula. However, it will be noted from Figure 2 that the required local revenue for the support of the basic state program is so small a proportion of the program that the Alabama formula is hardly a Strayer-Haig-Mort equalization formula but more nearly a flat grant formula such as the type used by New Mexico, as shown in Figure 31.

Alabama includes 70% of its total state and local revenue in its basic minimum program which is equalized throughout the state. It has already been pointed out that almost all of that revenue is provided from state sources. It will also be noted from Figure 2 there is not much difference between state and local revenue available for the least wealthy districts in Alabama as compared with the most wealthy.

In New Mexico, approximately 71% of state and local revenue is included in the basic program equalized throughout the state. It will also be noted from Figure 31 that the differences between per pupil revenue of the least wealthy districts and the most wealthy districts are not great. From these two profiles, it is apparent that as the amount of local effort required to support basic state or foundation program guaranteed throughout the state approaches zero that the Strayer-Haig-Mort Formula actually approaches the flat grant formula.

Let us now contrast Connecticut, shown in Figure 8 with the state of New Mexico. Connecticut also used the flat grant formula for its basic program. Under the flat grant formula or model, the basic state program is supported entirely from state funds with no local funds required. It will be noted from Figure 8 that the basic state program equalized throughout Connecticut comprises only about 20% of state and local revenue. It will also be noted from Figure 8 that the districts of least wealth in Connecticut have considerably less revenue available per child from state and local funds than the most wealthy districts.

It can be generalized from these profiles, that other things being equal, the higher the percent of state revenue provided, the greater the equalization of educational opportunity. This is true, regardless of whether the Strayer-Haig-Mort equalization formula is used to apportion funds or the flat grant formula.

If all school districts in a state would make the same effort in proportion to ability, the wealthiest districts would invariably raise a greater amount of money per pupil from local property taxes than the districts of least wealth. That is, assuming that property is assessed in all districts at the same percent of true value and assuming that all districts levy the same local tax rate, the amount of local tax revenue per pupil would be perfectly correlated with the amount of wealth per pupil. This fact is demonstrated in Figure 1. However, Figure 1 is the profile of a hypothetical state, not a real state. An examination of the actual profiles of 49 states, Figures 2 to 50 will show that the amount of revenue per pupil from local taxes is not perfectly correlated with wealth per pupil. It should be remembered that the districts included in the profiles are arranged in order of wealth per pupil from highest to the lowest. However, the profiles show that the effort in proportion to ability is much more nearly uniform in some states than in other states. For example, Figure 5 shows that in the State of Arkansas, the districts of least wealth were generally raising considerably less money from local taxes per pupil than the districts of greatest wealth. This is what one would expect if the districts of a state were making somewhat near the same effort in proportion to ability. In studying these profiles, in order to compare the amount of revenue per pupil obtained from local sources, it is necessary to add the amount of local revenue per pupil required in the basic state program to the local revenue not required in the basic state program.

Let us now examine Figure 29, which shows the profile for the state of New Hampshire. There is not a great deal of difference in the amount of revenue available per child in the four districts of least wealth from the revenue per child in the four districts of greatest wealth. This is due to the fact that the districts of least wealth in the state of New Hampshire make a far greater effort in proportion to ability than the districts of greatest wealth. Throughout the United States the differences among districts in the revenue available per child are not nearly as great as they would be, simply because in many states the districts of the least wealth are making a much greater effort in proportion to ability than the districts of the greatest wealth.

The two largest school districts in each state were included in the sample because many complaints have been made in recent years that the states have been discriminating against the large urban districts. The profiles show clearly that the states *have not been systematically discriminating* against the large urban districts. The profiles show that the states have been providing the large urban districts from a combination of state and local funds required in the basic state program approximately the same total amount of funds per pupil as is provided throughout the state. It is true that some of the large urban districts have a high percentage of high cost pupils, particularly the culturally disadvantaged. Studies made by the National Educational Finance Project show that the same thing is true of many rural districts, some medium and small sized cities and even some suburban districts.[15] The cost differentials for concentrations of high cost pupils should be provided for in all classes of districts, not just in urban districts.

ANALYSIS OF TABLES

Tables 3-1 and 3-2 present additional information. They should be used in conjunction with the profiles. Column 2 of Table 3-1 shows the ratio of the wealth per pupil in the wealthiest district in each state to the wealth per pupil in the district of least wealth. It should be remembered that the sample of districts from each state include only districts that have 1,500 pupils or more in average daily attendance. Therefore, the actual ranges in wealth per pupil may be greater than shown in this table. It is observed from Table 3-1 that the ratio in wealth per pupil ranged from 2.15 in North Dakota to 84.52 in Texas.

Column 3 of Table 3-1 shows the ratio of revenue per pupil in the district having the greatest amount of revenue to the district having the least amount of revenue. Since the sample includes only a maximum of 17 districts from each state and only districts with an ADA of 1,500 or above, the actual variations in each state in revenue per pupil may be greater than shown in Table 3-1.

In 14 states the most favored districts in revenue have more than twice the amount of revenue available per pupil as the least favored districts. In 42 of the 49 states, the most favored district has at least one and one-half times the revenue per pupil as the least favored district. It is not assumed that all districts need or should have the same amount of revenue per pupil. As a matter of fact the evidence presented in Volume III of the National Educational Finance Project entitled *Planning to Finance Education* shows clearly that the cost per pupil is much higher for compensatory education for the culturally disadvantaged, for the education of exceptional children and for vocational education than for other pupils. Districts having a high concentration of these types of high cost pupils need a greater amount of revenue available per pupil than districts of lower concentrations of high cost pupils in order to have equal educational opportunities. Unfortunately, the number of high cost pupils in each of the districts included in the samples for the 49 states was not available to the staff of the National Educational Finance Project. Therefore, it was not possible to estimate how much of the variation among the districts was justifiably due to concentration of high cost pupils. However, it is believed that very little of the actual variation was due to this factor. The number of high cost pupils in a district is associated with the socio-economic level of a district, that is, the lower the socio-economic level the greater the percent of high cost pupils in a district. In Chapter 9 of this Volume, Van Fleet shows that instead of having more revenue available per pupil in districts with the lowest socio-economic level, the tendency is to have less revenue available per pupil.

Columns 4, 5, 6, and 7 of Table 3-1 show the correlations between per pupil revenues available from different sources and the wealth per pupil in the school districts in a state. The positive correlation means that the district with the greatest wealth receives the greatest amount of revenue per pupil from the source indicated. A negative correlation indicates that the districts in a state of least wealth receive the greatest amount of revenue per pupil from the source indicated. It is to be expected that the *local school revenue per pupil* would be positively correlated with the wealth per pupil. If all districts in each state made the same effort in proportion to ability, the correlation of local revenue per pupil with wealth per pupil would be 1.0. However, column 4 of Table 3-1 shows that the correlation is less than 1.0 in all 49 states and in 7 states it is not even statistically significant. This indicates that school districts vary greatly in most states in the local tax effort made to support schools in relation to ability.

Column 5 shows that most states apportion basic state funds in inverse relation to ability. That is, basic state funds are used to equalize differences in local taxpaying ability among the districts of most states. The correlations between basic state funds per pupil and local wealth per pupil were negative in 45 of the 49 states and significantly so in 36 states. A negative correlation means that state funds are apportioned in inverse proportion to local taxpaying ability. Therefore, basic state school revenue has a significant equalizing influence in most states.

Column 6 shows that the state categorical revenue does not have nearly as great an equalizing effect as basic state revenue. Actually, seven of the states showed significant positive correlations which means that in those states, state categorical funds were disequalizing in their effect. Categorical funds had a significant negative correlation with local ability in only two states. In most states, categorical funds are either disequalizing or neutral in effect.

It is particularly interesting to note the relationship of federal revenue received to the financial ability of districts in each state. Column 7 shows the federal revenue was significantly negatively correlated with financial ability in 13 states at the .05 level. In 4 states federal revenue received was positively correlated with wealth per pupil and, therefore, tended to be disequalizing in effect. However, the amount of federal revenue received per pupil was actually negatively correlated with wealth per pupil in 40 states although most of these correlations were not significant at the .05 level. Therefore, it can be concluded that federal revenue has tended to have an equalizing influence among the districts of the states although the influence of federal funds on equalization is not as great as the influences of basic state aid on equalization. It is interesting to note that although all federal funds are categorical in nature, federal categorical funds are more equalizing in their influence than state categorical funds.

Table 3-2 shows the percent of revenue received by the districts in the sample from each source. It is noted that the revenues received from local sources and from basic state aid are by far the most important sources. Therefore, the revenues from these two sources have more influence either positive or negative on equalization than the revenues from other sources.

SOME IMPLICATIONS FOR SCHOOL FINANCING

The evidence presented in this chapter shows clearly that the goal of financial equalization of educational opportunity is far from being attained in most states. If financial equalization of educational opportunity, including adequate recognition of differences in the taxpaying ability and educational needs of districts is to be attained, what policies are indicated? Evidence presented in this chapter shows that local revenue is disequalizing and that basic state revenue is generally equalizing in effect. Categorical state revenue is generally neutral or disequalizing in effect. Federal revenue is generally equalizing in its effect on *districts within a state.* In Chapter 8, Bedenbaugh shows that federal funds are generally equalizing *among the states* of the nation. These facts suggest that a policy of increasing the proportion of the school revenues of a state from basic state aid and from the federal government and decreasing the proportion of revenue from local sources and from state categorical sources would enhance the financial equalization of educational opportunity in any state. This statement assumes that the cost differentials for high cost pupils are provided for in the financial program. These differentials can be provided for only from state or federal revenues. One can take the profile of any state and estimate the effect on equalization of educational opportunity of shifting the bases of school financial support as indicated above. Converting categorical state revenue into basic state school revenue and reducing local revenue and increasing basic state revenue proportionately will increase equalization in any state. Furthermore, equalization can be enhanced by increasing the proportion of local revenue charged back against a district in a Strayer-Haig-Mort equalization type of formula. That policy in effect converts local revenue into state revenue.

A few states are providing financial incentives in their programs of state support which provide financial rewards to districts that make greater effort in proportion to ability than other districts or to districts that levy local taxes in addition to mandated local school taxes. What is the effect of this policy on equalization of financial resources? If the people in some districts have a higher aspiration level for their children than in some other districts, they will make a higher local tax effort for schools and they will not only have more local money available per pupil but they will also receive more state money. The districts that have a higher aspiration level, it is hypothesized, also have a higher socio-economic and cultural level. Therefore, state incentive grants to entice the taxpayer of a school district to make extra local effort for schools has the effect of disequalizing educational opportunity. The maintenance of local tax effort to support schools is essential as long as schools are jointly supported by state and local revenues. However, would it not be better policy for the state to mandate the desired level of local taxes to be levied for the support of schools than to attempt to reach that level by financial incentives? However, if a state *mandates* a local levy for schools, *all* of the proceeds of that levy should be deducted from the computed cost of the state guaranteed program in order to determine the state funds to which the district is entitled in accordance with a Strayer-Haig-Mort type of equalization formula.[16] If the state does not follow that policy, the state actually *mandates* disequalization of educational opportunity because the wealthiest districts will usually receive several times the amount of revenue per pupil received by the least wealthy districts.

Another alternative would be for the state to levy a state wide property tax for schools to be distributed in the form of basic aid, at the same time reducing the amount of local taxes that could be levied.

The entire question of optimum resource allocation could be raised not only in connection with school funds, but also funds allocated by the federal government and state governments for other governmental functions. If any central government, federal or state, allocates funds in such a manner as to increase the allocation from the central government as the effort of the state or local government increases, a misallocation of resources is likely to occur. That is local governments will increase their expenditures for those governmental functions which will result in their receiving the greatest amount of state and federal revenues. Thus, local governments are tempted to allocate their resources not for the governmental services most needed but for the functions bringing the greatest revenue from central governments. The same statement could be made with respect to financial relationships between the state and the federal government.

It should not be inferred from the above statements that local school districts should be prohibited from making a local tax effort higher than the minimum local tax effect required by the state. Some variation in revenue is needed in order to encourage experimentation and innovation. But the decision of the taxpayers of a district to make an extra local tax effort should be based on the desire for and the willingness to pay for a higher quality of education rather than being determined by financial incentives provided by central governments.

Finally, it should not be inferred that the profiles of the school finance patterns of the states for the year 1968-69 are valid in subsequent years for states that have made substantial changes in their school finance formulas since 1968-69. Such states will find it useful to construct current profiles for the same districts and compare these profiles with 1968-69 profiles. It would also be useful if the United States Office of Education would reconstruct these profiles every five years, perhaps using a more extensive sample of districts from each state. It would also be desirable to substitute weighted pupils for average daily attendance if and when such information becomes available for all states.

FOOTNOTES

1. Ellwood P. Cubberley, *School Funds and Their Apportionment,* (New York: Teachers College, Columbia University, 1905)

2. National Center for Educational Statistics of the U. S. O. E. *Equality of Educational Opportunity,* (Washington, D. C.: United States Government Printing Office, 1966).

3. National Education Association, Research Division, *Estimates of School Statistics 1969-70,* (National Education Association, 1969).

4. Stephen J. Weiss, *Existing Disparities in Public School Finance and Proposals for Reform,* (Boston, Massachusetts: Federal Reserve Bank of Boston, 1970).

5. H. Thomas James, J. Alan Thomas, and Harold J. Dyck, *Wealth, Expenditure, and Decision-Making for Education,* (Stanford, California: School of Education, Stanford University, 1963); H. Thomas James, *School Revenue Systems in Five States,* (Stanford, California: School of Education, Stanford University, 1961).

6. C. O. Fitzwater, *School District Reorganization: Policies and Procedures,* (Washington, D. C.: United States Government Printing Office, 1957).

7. American Association of School Administrators, *School District Organization: Report of the AASA Commission on School District Reorganization,* (Washington, D. C.: American Association of School Administrators, 1958).

8. Edgar L. Morphet and R. L. Johns, eds. *Planning and Financing Education for the Future,* (Columbia, Missouri: Report for the Missouri Governor's Conference on Education, 1968).

9. The details of this study are reported in William P. Briley's *An Analysis of the Variation Between Revenue Receipts and Financial Ability for Selected School Districts Within the 48 Contiguous States and Alaska,* Gainesville, Florida: University of Florida, 1970. (This study was sponsored by the National Educational Finance Project.)

10. Research has not established a precise figure for the efficient size of a school district. However, many authorities agree that a minimum level of from 1000 to 1500 pupils is necessary for efficient district operation.

11. Two states, Montana and Arizona, have no school districts for grade levels one through twelve. In these cases the elementary and secondary school districts were arbitrarily combined into comprehensive school districts.

12. Not all states contained seventeen districts with a pupil population of at least 1500. In these states the minimum district size was progressively lowered until seventeen districts were obtained, or until the minimum level reached 1000 pupils.

13. "Basic state program" refers to that comprehensive program of educational services which is financed with respect to some measure of local district ability. State special purpose revenue represents all state revenue in addition to the basic state program except those revenues allocated for transportation, capital outlay, and debt service.

14. State revenue for the basic state program, state categorical or special purpose revenue, local revenue and federal revenue.

15. See Dewey Stollar and Gerald Boardman, *Personal Income By School Districts in the United States* (Gainesville, Florida: The National Educational Finance Project, 1971).

16. The same objective can be accomplished with any type of equalization formula which allocates state funds in inverse relationships to local taxpaying ability.

CHAPTER 4

The Financial Equalization of Public School Support Programs in the United States for the School Year, 1968-69

ROE L. JOHNS
AND
RICHARD G. SALMON

Equalization of educational opportunity has long been an important goal of those concerned with public school finance. There is little doubt that the "equalization concept" is a highly esteemed value in the American culture. Mort and Reusser observed that equality of educational opportunity is a principle that is fundamental to American education. It is a principle which is based upon the assumption that our democratic form of government is best served by extending equally an adequate minimum educational opportunity to all children.[1]

Despite the attention that has been focused on equalization of educational opportunity, there has been little agreement on a precise definition for this broad concept. It is a concept that has different meaning for different people, depending upon their field of interest. Equalization of educational opportunity may have one meaning for those individuals concerned with school integration and a different meaning for those whose primary interests lie in providing the financial resources for public education. The National Educational Finance Project has focused its attention in this study primarily on the provision of the financial resources necessary to provide adequate educational opportunities for all the children and youth of the nation.

In this section of the studies, the central staff of the NEFP has attempted to analyze, through the utilization of a new technique, the NEFP Typology, the financial equalization of public school support programs in the United States.

Fortunately, the financial equalization of educational opportunity has been precisely defined by various writers. Doherty furnished a concise definition:

> Equalization funds are funds collected by the state through its taxing authority and distributed to local school districts in such a way as to make more nearly equal the local property tax required to support a specified level of expenditure. To put it simply, school districts with low property valuation get more equalization funds than those with high property valuation, other things being equal.[2]

In a publication by Johns and Morphet, a similar definition was furnished:

> Financial equalization . . . the effect of any plan for financing schools determined by whether (and the extent to which) the plan tends to provide funds for schools in such a way that those districts least able to finance a program of essential educational opportunities (a foundation program) with local funds receive proportionately more money from state sources than the more able districts.[3]

For the purposes of this study the following definition was used:

> *Financial equalization is most nearly accomplished when the following two factors are met: (1) the varying educational needs of the student population are taken into consideration before the allocations are made, and (2) the variation of the ability of the local school districts to support education is reduced or eliminated through the utilization of state resources.*

Despite the utilization of numerous equalization plans, educational opportunities as measured by financial resources are far from being equal today. There are many studies that document the wide variation in financial resources being used for public education among states, and even wider variations are evident among districts within a state. The problem appears to be inherent in the organizational structure of public education utilized by most of the states in the United States.[4] That is, since the state-local-federal partnership of public education relies heavily on local *ad valorem* taxes, disparities in school expenditures per child are created by the variations in the tax bases of local districts.

As mentioned previously, various plans and formulas have been developed for the purpose of financial equalization. Such school support programs appear to fall into the following broad classifications (See Table 4-1, appended):

1. *Flat Grants*

a. Uniform Flat Grants Allocated to all Districts Regardless of Wealth.

The state revenue is allocated on the basis of a flat amount per child or per teacher or some other method that does not take into consideration either the variation in educational needs of the student population or the variation in the taxpaying ability of the local districts. This type of grant may be either general or special purpose.

b. Variable Flat Grants Allocated to all Districts Regardless of Wealth.

This is a more sophisticated type of flat grant which is allocated on a similar method as the Uniform Flat Grant. However, the units such as pupil or teacher units are weighted according to variations in costs due to factors beyond the control of the boards of education. For example, unit costs may vary due to grade level, type of educational program, sparsity, etc. This type of grant also may be utilized in the form of general or special purpose.

Uniform and variable flat grants although not providing maximum equalization do provide considerable equalization depending upon the amount of funds provided by the state. This is due to the fact that the more wealthy districts contribute more revenue to the state treasury than they receive back on a uniform allotment basis, whereas the less wealthy districts receive back from the state proportionately more funds than the revenue they contributed.

TABLE 4-1

CLASSIFICATION OF THE STATES INTO TYPES OF SCHOOL SUPPORT PLANS USED FOR THE SCHOOL YEAR, 1968-69

	EQUALIZATION PROGRAMS			
Flat Grant Programs	*Strayer-Haig Mort*	*Percentage Equalizing*	*Guaranteed Valuation or Tax Yield Plan*	*Complete State and Federal Support*
Arizona	Alabama	Iowa	Utah	Hawaii
Arkansas	Alaska	Massachusetts	Wisconsin	
Connecticut	California	New York		
Delaware	Colorado	Pennsylvania		
New Mexico	Florida	Rhode Island		
North Carolina	Georgia	Vermont		
South Carolina	Idaho			
	Illinois			
	Indiana			
	Kansas			
	Kentucky			
	Louisiana			
	Maine			
	Maryland			
	Michigan			
	Minnesota			
	Mississippi			
	Missouri			
	Montana			
	Nebraska			
	Nevada			
	New Hampshire			
	New Jersey			
	North Dakota			
	Ohio			
	Oklahoma			
	Oregon			
	South Dakota			
	Tennessee			
	Texas			
	Virginia			
	Washington			
	West Virginia			
	Wyoming			

2. *Equalization Grants*

All equalization grants take into consideration variations in the taxpaying ability of the local districts, but not all equalization grants consider the variations of educational needs of the student population. Like the flat grants, equalization grants may be either general or special purpose. There are many variations in equalization grants as follows:

a. Strayer-Haig-Mort Formula — Unweighted Measures of Need.

Educational needs are calculated in terms of a uniform amount per pupil or per teacher or some other method that ignores the variation of educational needs of the student population and the yield of a required local tax effort in proportion to ability is deducted from the total cost of the program in order to determine the state allocation.

b. Strayer-Haig-Mort Formula—Weighted Measures of Need.

Educational needs are calculated in terms of weighted unit costs such as weighted pupils or weighted teachers which take into consideration necessary unit cost variations and the yield of a required local tax effort in proportion to ability is deducted from the total cost of the program in order to determine the state allocation.

c. Percentage-Equalizing or State Aid Ratio Program.

Educational needs are calculated on either the basis of a or b above and the state aid to each district is computed according to the relationship of some measure of wealth per pupil to the same measure of wealth in the average district in the state. Under this plan, similar to the Strayer-Haig-Mort plan, state funds are allocated in inverse proportion to the taxpaying ability of the local school districts.

d. The Guaranteed Valuation or Tax Yield Per Unit of Need Plan.

Under this unique plan, the state guarantees to each district a fixed valuation or tax yield per pupil or per teacher unit. The pupil or teacher units may be weighted or unweighted. Basically, this model provides each district the difference between the yield of a given tax levy and its equalized assessed valuation and the yield of the same tax levy on the valuation per pupil or per teacher unit which the state has previously guaranteed for the state. This model provides much the same effect on equalization as the Strayer-Haig-Mort model.

3. *Non-Equalizing Matching Grants*

Non-equalizing matching grants require local districts to match state funds on a dollar-for-dollar basis, or some proportion of a dollar without taking into consideration variations in the taxpaying ability of local school districts. These types of matching grants leaves districts in the same relative status and therefore provide for no equalization.

The major purposes of this study of financial equalization of educational opportunity of public school finance programs were as follows: First, to determine the extent to which financial equalization is achieved in each state; Second, to provide a historical bench mark from which educational finance programs in the future can be evaluated with respect to progress made; and Third, to provide a method by which alternative school finance models may be evaluated with respect to financial equalization of educational opportunity.

In addition, answers were sought to the following questions:

1. To what extent does each state school fund meet the NEFP criteria for financial equalization?

2. How are the states ranked in regard to financial equalization and what are some of the probable explanations for the relative ranking of the states?

3. Geographically, what sections of the United States are best meeting the NEFP criteria for financial equalization?

THE INSTRUMENT—NEFP TYPOLOGY

Several methods of analyzing school support programs in regard to financial equalization are available.[5] However, none of the previous methods of analyzation was designed to answer the questions posed. For this reason a new typology for the classification of school funds was developed for the National Educational Finance Project. It was then successfully applied in a pilot study[6] to nine states for the school year 1968-69.

The NEFP Typology is based on the following assumptions.

1. That local school funds provide no financial equalization unless local variations in taxpaying ability are taken into consideration in the state's apportionment formula.

2. Assuming that a given amount of state revenue is apportioned to the districts of a state:

a. No equalization is obtained if state dollars are required to be matched dollar per dollar from local funds.

b. The first level of equalization is reached when state funds are allocated in the form of uniform flat grants per teacher or per pupil without taking into consideration necessary variations in unit costs and without taking into consideration variations in local taxpaying ability.

c. The second level of equalization is reached when state funds are allocated in the form of flat grants which take into consideration necessary unit cost variations but which do not take into consideration variations in local taxpaying ability.

d. The third level of equalization is reached when state funds are allocated in the form of uniform flat grants without taking into consideration necessary unit cost variations but which take into consideration variations in local taxpaying ability.

e. The fourth and highest level of equalization is obtained from a given amount of a state revenue when it is allocated in such a manner as to take into consideration necessary variations in unit costs, and also variations in the taxpaying ability of local school districts.

Briefly, the NEFP Typology classifies local and state funds into five levels of financial equalization: the levels range from Level 0 to Level 4. (See Figure 1 for a graphic presentation of the NEFP Typology).

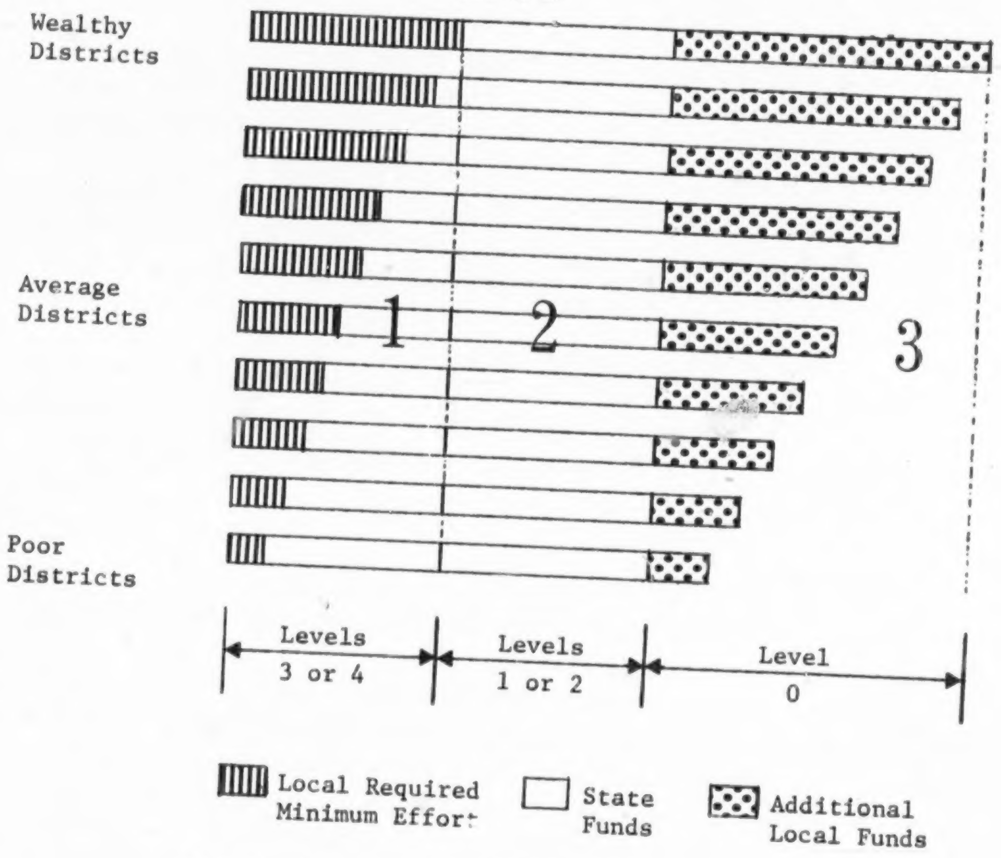
State Funds

State funds are classified into the following five levels according to the criteria established below:

1. *Level 0 of Equalization*: When state funds are allocated in such a manner as to leave districts with the same or greater differences in financial capacity to support education as they were before receiving state allocations they are classified in Level 0. A method of state distribution which is classified as Level 0 is a minimum guarantee of funds to certain wealthy districts which are not entitled to receive state funds under strict interpretation of the equalization formula. Also, if districts were not entitled to receive as much under the equalization formula as they received under a minimum guarantee, the difference between what they should have received under the equalization formula and the minimum guarantee amount is classified as Level 0. The remaining amount that the districts were entitled to under the equalization formula is classified as either Level 3 or Level 4 described below, depending on whether educational needs are taken into consideration. The allocation in dollar-for-dollar matching grants without regard for differences in taxpaying ability of the districts, provide for no equalization and are also classified in the zero level of equalization.[7]

2. *Level 1 of Equalization*: When state funds are allocated on the basis of a flat amount per unweighted pupil or unadjusted classroom unit basis, or some other method which ignores unit

FIGURE 1.


Wealthy Districts
Average Districts
Poor Districts
1
2
3
Levels 3 or 4
Levels 1 or 2
Level 0
Local Required Minimum Effort
State Funds
Additional Local Funds

BASIC MODEL OF NEFP EQUALIZATION TYPOLOGY

Section 1 of the model includes the minimum required local tax effort to support the state guaranteed program plus the state aid that would be received by the local districts if the wealthiest district or districts received no state aid. These funds can be classified either in Level 3 or 4 depending upon whether necessary unit cost variations are recognized in the formula.

Section 2 is that portion of state aid which is received by all districts in the form of flat grants. These funds are classified in either Level 1 or Level 2 depending upon whether necessary unit cost variations are recognized.

Section 3 includes local funds in addition to those taken into consideration in apportioning equalization funds. These funds are classified at the 0 Level of equalization.

cost variations in meeting the educational needs of the students, and a required local share[8] in proportion to the taxpaying ability of the local districts is not deducted before the apportionment is made, the funds are classified in Level 1.

3. *Level 2 of Equalization*: When state funds are allocated on a weighted unit basis or some other method that recognizes unit cost variations in meeting the educational needs of the students and a required local share in proportion to the taxpaying ability of the local district is not deducted before the apportionment is made the funds are classified in Level 2 of equalization.

4. *Level 3 of Equalization*: State funds are classified in Level 3 when they are allocated on the basis of unweighted pupils or some other method that ignores necessary variations in unit costs, but a required local share in proportion to the taxpaying ability of the local districts is deducted before the apportionment is made.

5. *Level 4 of Equalization*: When state funds are allocated on a weighted pupil basis or some other method that recognizes unit cost variations in meeting the educational needs of the students and a required local share in proportion to the taxpaying ability of the local districts is deducted before the apportionment is made, they are classified in Level 4 of equalization.

It will be noted that the NEFP Typology is a continuum ranging from Level 0, which provides for no equalization, to the highest level of equalization which is Level 4.

Local Funds

Local funds can also be classified by the NEFP Typology. The required local share in proportion to the taxpaying ability of the local districts that is deducted from the total cost of basic program is classified as either Level 3 or Level 4 depending on whether unit cost variations in meeting the educational needs of the students are taken into consideration. The remaining local revenue raised for the support of education is considered additional local revenue and is classified as Level 0 of equalization.

INSTRUCTIONS FOR APPLYING THE NEFP TYPOLOGY

The following is a description of how the NEFP Typology was applied to various school support programs:

I. *Flat Grants*

Flat grant programs are very easily classified by the NEFP Typology. If the funds are allocated on the basis of a flat amount per pupil on some other basis that ignores meeting variations in unit costs, the appropriation is classified as Level 1. If the students are weighted or some other basis that recognize differences in unit costs is used, the appropriation is classified in Level 2.

All the local funds in a state which do not take into consideration variations in the taxpaying ability of local districts in its formula for distributing state funds (i.e., uniform and variable flat grants) are classified in Level 0. If a state using an equalization formula deducts the amount of a flat grant received by a district in determining the amount of the equalization fund to which it is entitled, that part of the flat grant so deducted in effect becomes an equalization fund and should be classified as either Level 3 or 4 as described under D below.

Examples:

State A—Uniform Flat Grant Fund

State Share—Distributed on the basis of a flat amount per pupil

State Funds	$70,000,000
Local Share—None Required	
Local Funds	$30,000,000
Classification:	
State Funds	$70,000,000 = Level 1
Local Funds	$30,000,000 = Level 0

State B—Variable Flat Grant Fund

State Share—Distributed on the basis of weighted pupils (i.e. Elementary pupils assigned a weighting of 1.0, Secondary pupils a weighting of 1.25, Special Education pupils, a weighting of 2.0, etc.)

State Funds	$70,000,000
Local Share—None Required	
Local Funds	$30,000,000
Classification:	
State Funds	$70,000,000 = Level 2
Local Funds	$30,000,000 = Level 0

II. *Equalization Programs*

A. Strayer-Haig-Mort Formula

When the Strayer-Haig-Mort formula is used to apportion state funds, all state funds apportioned under this plan could be classified as either Level 3 or Level 4 if the yield of the required local share for the support of the program is equal to or exceeds the total cost of the program in the wealthiest district in the state. If necessary differences in unit costs are taken into consideration when computing the cost of the Strayer-Haig-Mort program, the state funds are classified in Level 4 and if necessary differences in unit costs are ignored the funds are classified in Level 3.

However, if the required local share is less than the computed cost of Strayer-Haig-Mort program in the wealthiest district in the state, the following procedures are utilized in determining the classification of the state and local funds of the program:

1. The percentage of the total cost of the Strayer-Haig-Mort program that is financed from state funds in the wealthiest district is computed.

The wealthiest district is selected in most states from districts which have 1,500 pupils or larger in average daily attendance. Districts smaller than 1,500 pupils in average daily attendance were eliminated because it is assumed that such small inefficient districts will be consolidated in the future. Further, it is possible for small districts to have extremely high valuations per pupil which are not comparable to most districts in the state. However, in some states which have large numbers of very small districts it is necessary to select the wealthiest district from districts 1,000 pupils in average daily attendance.

2. The percentage computed under 1 is multiplied by the total cost of the Strayer-Haig-Mort program in that state, and the product is the part of the state Strayer-Haig-Mort program funds in that state which is classified as either Level 1 or Level 2, depending upon whether differences in unit costs are taken into consideration in computing the cost of the Strayer-Haig-Mort program.

3. From the total state funds provided for the support of the Strayer-Haig-Mort program, the amount computed under 2 is deducted. The remainder is classified under Level 3 or Level 4, depending upon whether differences in educational needs are taken into consideration in computing the cost of the Strayer-Haig-Mort program.

4. The required local share is deducted from the total local funds used for the support of the public schools in the state and classified as either Level 3 or Level 4, depending upon whether

differences in educational needs are taken into consideration in computing the cost of the foundation program. The remaining local revenue is considered as additional local funds providing no equalization and classified in Level 0.

Examples:

State A—Strayer-Haig-Mort Formula (Wealthiest district receives no state equalization funds)

1. Given the total cost of the Strayer-Haig-Mort program is:

a. 140,000 units @ $500 per unit	$70,000,000
b. Local Share	$20,000,000
c. State Share	$50,000,000

2. Given that additional local funds are $30,000,000
3. Given that the total cost of the program for the wealthiest district in the state is $1,000,000 (2,000 units × $500) with a state share of 0 and the required local share of $1,000,000, the cassification is made as follows:
    a. State Funds—$50,000,000 Level 3 or 4
    b. Local Funds

(1) Required Local Share Level 3 or 4	$20,000,000
(2) Additional Local Funds Level 0	$30,000,000

If units of educational need are weighted in proportion to necessary cost variations, the funds are classified in Level 4 and if not, in Level 3.

State B—Strayer-Haig-Mort Formula (Wealthiest district receives equalization funds)

1. Given the total cost of the Strayer-Haig-Mort program is:

a. 140,000 units @ $500 per unit	$70,000,000
b. Local Share	$20,000,000
c. State Share	$50,000,000

2. Given that the additional local funds are $30,000,000
3. Given that the total cost of the program from the wealthiest district in the state is $1,000,000 (2,000 units × $500) with a state share of $700,000 and the required local share of $300,000, the classification is made as follows:

a. 70% of cost assumed by the state
b. 70% × total cost of the program for the state (state and local)
c. .70 × \$70,000,000 = \$49,000,000
d. \$50,000,000—\$49,000,000 = \$1,000,000
e. State Funds
    (1) \$49,000,000 Level 1 or 2
    (2) \$ 1,000,000 Level 3 or 4
f. Local Funds

(1) Required Local Share Level 3 or 4	\$20,000,000
(2) Additional Local Funds Level 0	\$30,000,000

If units of educational needs are weighted in proportion to necessary cost variations, the funds are classified in the higher level of equalization.

B. Percentage Equalizing or State Aid Ratio Formula

When the percentage equalizing program is used to apportion state funds, the entire allocation can be classified in either Level 3 or Level 4 if the local share in the wealthiest district or districts exceeds the calculated cost of the total program. If units of educational need are weighted in proportion to necessary cost variations, the entire allocation is classified in Level 4, and if not, in Level 3. However, if the wealthiest district or districts receives state funds under a minimum percentage guarantee, the following procedures are used in the classification of state funds:

1. Each district participating under the minimum percentage guarantee is identified.

2. The percentage of cost (state aid ratio) which the districts would have been entitled to except for the minimum percentage of cost guarantee is determined.

3. The difference between what they are entitled to if there was no minimum percentage of cost guarantee and what they actually receive is calculated, totalled, and classified as Level 0.

4. If the wealthiest district or districts is entitled to no funds except under the minimum percentage of cost guarantee, then the difference between the total funds apportioned under this program and the funds identified in 3 above is classified as Level 3 or Level 4 as described above.

5. However, if the wealthiest district or districts are still entitled to funds, even without the minimum percentage of cost

guarantee, the funds identified in 4 are classified in a similar method as funds classified under a Strayer-Haig-Mort program.

Local funds are easily classified. The calculated local share (without the minimum percentage of cost guarantee) is identified and classified as Level 3 or Level 4 depending upon whether necessary differences in unit costs are taken into consideration before the apportionment of state funds is made. The difference between the total local funds and the calculated local share is considered additional local funds which provide no equalization and classified as Level 0.

C. The Guaranteed Valuation on Tax Yield Per Unit of Need Plan

The classification of this plan is achieved in a similar manner as the percentage equalizing program previously discussed.

D. Classification of Special Purpose Funds and Flat Grants Deducted in Apportioning State Equalization Funds

If flat grants, either general or special purpose, received by a district are deducted from the equalization fund to which the district would otherwise be entitled, then such state funds are classified as either Level 3 or Level 4. If necessary differences in costs of the units of educational need are taken into consideration in the allocation of the equalization fund, such funds are classified as Level 4 and if ignored they are classified as Level 3.

If the state allocates a uniform amount per pupil transported without reference to differences in sparsity of population and differences in local taxpaying ability, that apportionment is classified in Level 1. If different amounts per pupil are allocated which takes into consideration differences in sparsity but not differences in taxpaying ability, the apportionment is classified in Level 2. If state funds for transportation are allocated on the basis of a uniform amount per pupil and differences in taxpaying ability of local school districts are taken into consideration, the apportionment is classified in Level 3. If both sparsity and differences in taxpaying ability are taken into consideration, the apportionment is classified in Level 4.

The same rationale should be employed in classifying most other special purpose grants.

Special appropriations for such items as textbooks presents a unique situation. For example, there are no significant differences in cost per textbook for the same grade level for students of different types of school districts; consequently, there is no need for the allocation to take into consideration differences in costs. Therefore, the state apportionment for school textbooks based on the uniform amount per pupil allocated without reference to differences in taxpaying ability of local school districts is classified in Level 2, and if differences in taxpaying ability are taken into consideration, in Level 4. The policy followed in classifying appropriations for textbooks is utilized in the classification of other special appropriations. That is, if there are differences in local educational costs per unit which are due to conditions beyond the control of the local boards of education, those differences should be taken into consideration in the allocation formula in order for the apportionment to be classified in the higher level. However, if there are no differences in unit costs, as in the case of the cost of textbooks, then the state apportionment is classified in the higher level of equalization.

DEVELOPING AN EQUALIZATION SCORE

A state advances toward the equalization of the financial resources available for education when it:

1. Increases the percent of school revenue provided from state sources.
2. Apportions the state funds available in inverse proportion to the taxpaying ability of local school districts.
3. Makes allowance in its apportionment formula for the necessary variations in costs per unit of educational need.

In the following paragraphs, a method of scoring the extent of financial equalization of educational opportunity in a state is developed which includes the three variables listed above. This measure is comparable among the states. It is not intended to measure all of the desirable characteristics of a state support. It was devised solely to measure the extent of financial equalization.

Scoring Unitary Models

1. A finance model with all school funds provided from local sources would have the minimum equalization score unless the state would be comprised of only one district as is the case of Hawaii. A state comprised of only one district would have a maximum equalization score if all funds were provided from local sources or state sources or a combination of state and local sources assuming that budgetary provision is made for pupils in different communities with varying needs and conditions re-

quiring varying per pupil expenditure to provide equivalent educational opportunities. Even in states organized into units large enough to permit reasonable efficiency and economy of scale, districts will usually vary at least from 5 to 1 to 7 to 1 in equalized valuation per pupil. For our first model, let us assume that a state comprised of a number of districts varying in wealth, finances its schools entirely from local funds. Such a state has the minimum level of equalization. Let us assign the score of 1 as the equalization value of any funds providing no equalization. Therefore, a finance model which included no funds equalizing the differences in taxpaying ability among districts would be given an equalization value of 1.

2. Finance model 2 under which all school funds are provided by the state by a formula which allotted the same amount per pupil to all districts would eliminate the differentials among districts in financial ability. The equalization value of this model should be at least 5 to 7 times the equalization value of model 1.

3. For model 3, let us assume that all funds are provided by the state but that cost differentials due to sparsity, high cost of disadvantaged or exceptional pupils, vocational education, etc., are provided for in the state formula. Although the cost per pupil for vocational education, exceptional education, and compensatory education may be as great as 2 or 3 to 1 and the cost of transportation and the extra expense of low pupil-teacher ratios in sparsely settled areas, may be considerable, the *necessary* variations of the total per pupil costs among efficiently organized districts probably do not exceed 20 percent for a significant number of districts within a given state. Therefore, if we include necessary variations in school costs in model 3, it would at least be a 20 percent improvement in equalization over model 2.

Scoring Mixed Models

Most states have complex finance models comprised of local funds, (some equalized in state programs and some unequalized), flat grants equalized and unequalized, and variable unit grants equalized and unequalized.

Let us assume that local funds become state funds when they become part of the equalization formula. That is that portion of local funds included in the state guaranteed program before determining the allocation of state funds to a district, in effect, becomes a state fund used to equalize educational opportunity.

43

We have already classified state and local funds according to the following typology:

1. Level 0—State or local funds providing no equalization.

2. Level 1—State funds allocated to local districts according to a uniform amount per unit of need.

3. Level 2—State funds allocated to local districts in accordance with necessary variations in unit costs.

4. Level 3—State funds allocated to local districts according to a uniform amount per unit of need plus any local funds deducted in the equalization formula if an equalization formula is used.

5. Level 4—State funds allocated to local districts in accordance with necessary variations in unit costs plus any local funds deducted in the equalization formula if one is used.

We are now ready to score mixed models utilizing the typology set forth above. Let us assume that as we move toward equalization, all state funds become Level 3 funds and all local funds are charged back in allocating state funds (that is deducted before allocating state funds). Let us then assign an equalization value of 7 for Level 3 equalization.

As we approach maximum equalization, all state and local funds become Level 4 funds. If all state funds were allocated on a Level 4 formula and all local funds charged back, the maximum equalization value for this model would be 8.4 which would be 20 percent more than the maximum value of Level 3 funds.

The following scoring method is developed from these assumptions:

1. Level 0 funds are assigned a score of 1 in order that other levels may be made proportional to it.

2. Level 1 funds have at least 5 times the equalization value of equalization Level 0 funds. As Level 1 funds approach 100 percent of total state and local funds, the equalization value of Level 1 funds approaches the value of Level 3 funds. Therefore, the equalization value of Level 1 funds should be computed as follows: [5 + (.02 × the percent of total state and local funds in Level 1)].

3. Level 2 funds have at least 20 percent more equalization value than Level 1 funds. However, as Level 2 funds approach 100 percent of state and local funds, the equalization value of Level 2 funds approaches the value of Level 4 funds which have

the maximum equalization value. Therefore, the equalization value of Level 2 funds should be computed as follows: [6+ (.024 × the percent of total state and local funds in Level 2)].

4. As indicated above, Level 3 funds are assigned an equalization value of 7.

5. Level 4 funds are assigned the maximum equalization value of 8.4 which is 20 percent higher than Level 3 funds.

This method of scoring assigns higher equalization values as a state moves from the 0 Level of equalization through Levels 1, 2, 3, and 4 making proportionate allowances as a state moves toward greater equalization by using both state and local funds to eliminate the disadvantages of inequalities of wealth among districts, by making financial provision for necessary variations in unit costs and by increasing the percent of school revenue provided from state sources.

This equalization score should not be considered as a total evaluation of the financial program of a state. The equalization score does not take into consideration such important factors as financial adequacy of the program, incentive to local initiative, quality of education, educational outputs, and other important matters. The equalization score should be interpreted only as measuring the extent that state and local funds are being used to equalize the financial resources available for education in a state.

IMPLICATIONS AND SUMMARY OF THE NEFP TYPOLOGY

In the introduction, three questions were posed for this study to answer. The questions and responses are presented below:

1. *What percentage of each state's school support funds is meeting the criteria of financial equalization?*

Tables 4-5 to 4-54 (appended) display the classification of each state according to the NEFP Typology. Each school support fund within a state is listed in the level of equalization that it was classified. The state, local, and total state and local funds were totalled and the percentage of funds in each level was calculated. Both the actual total dollar amounts and the percentage of funds in each level are also displayed.

In reply to the question posed above, each state is achieving some degree of financial equalization. With some exceptions[9] the states that have the highest percentage of funds in Levels 3 and 4 are best meeting the criteria of financial equalization. The percentage of funds in equalization levels range from 100 percent in Level 4 for Hawaii to 72.2 percent in Level 0 for Connecticut.

2. *How are the states ranked in regard to financial equalization, and what are some of the probable explanations for the relative standings of the states?*

The states were ranked on the basis of the scores achieved by applying the procedures outlined herein and are presented in Table 4-2 (appended).

TABLE 4-2

RANKING AND EQUALIZATION SCORES OF THE STATES
BASED ON THE NEFP TYPOLOGY FOR THE SCHOOL YEAR, 1968-69

Rank	*State*	*Score*	*Rank*	*State*	*Score*
1	Hawaii	8.400	26	Maryland	5.092
2	Utah	7.143	27	Virginia	5.085
3	Rhode Island	6.862	28	Texas	4.963
4	Alaska	6.628	29	California	4.841
5	Wyoming	6.543	30	Montana	4.810
6	Washington	6.368	31	Maine	4.804
7	Idaho	6.318	32	Nevada	4.779
8	Alabama	6.220	33	Massachusetts	4.536
9	Delaware	6.202	34	Oregon	4.535
10	North Carolina	6.148	35	Tennessee	4.521
11	Georgia	6.103	36	Minnesota	4.433
12	Kentucky	6.042	37	Arizona	4.355
13	Florida	5.995	38	Iowa	4.042
14	New York	5.957	39	North Dakota	3.931
15	Louisiana	5.929	40	Missouri	3.852
16	New Mexico	5.915	41	Michigan	3.844
17	Ohio	5.882	42	Kansas	3.820
18	Pennsylvania	5.870	43	New Jersey	3.754
19	Vermont	5.834	44	Indiana	3.704
20	Wisconsin	5.781	45	Oklahoma	3.691
21	Mississippi	5.744	46	Arkansas	3.647
22	West Virginia	5.578	47	Colorado	3.571
23	Illinois	5.398	48	South Dakota	3.420
24	Nebraska	5.378	49	New Hampshire	3.091
25	South Carolina	5.235	50	Connecticut	2.295

The scores range from a high of 8.400 for Hawaii to a low of 2.295 for Connecticut. The mean score for all the states was 5.131.

It is interesting to note that the Pearson Product-Moment Correlation yielded a coefficient of +.646, which is significant at the .01 level, between the percentage of school funds provided by the state and the equalization score obtained by applying the

NEFP Typology. This supports the opinion of many authorities in school finance that when a state assumes the primary responsibility for funding its school support program greater financial equalization is usually achieved. However, if all state funds were apportioned on the Level 4 basis, the correlation between percentage of school funds provided by the state and the equalization score obtained from the NEFP Typology would be higher.

Also, when the Pearson Product-Moment Correlation was applied to each state's equalization score and total number of school support grants, a coefficient of -.294, which is significant at the .05 level, was found. Although this coefficient was not extremely high, it does give added support to those persons who contend that a proliferation of categorical grants usually detracts from financial equalization.

The Pearson Product-Moment Correlation between the number of districts in a state and the equalization score was -.312 significant at the .05 level. This may indicate the existence of a large number of districts in a state is a political factor retarding the development of financial equalization in a state.

3. *Geographically, what sections of the United States are best meeting the criteria of financial equalization?*

The United States was divided into eight geographical regions,[10] and the mean score for the states in each region was determined. The mean score for each region is displayed in Table 4-3 (appended). The geographical regions were then ranked according to their mean scores and are displayed in Table 4-4 (appended). The mean scores for the geographical regions ranged from a high score of 5.677 for the Rocky Mountains to a low score of 4.125 for the Plains.

SUMMARY

The NEFP Typology was developed for the National Educational Finance Project to provide those persons concerned with educational finance with the current status of the equalization of financial resources for education according to an objective measure.

In review, the NEFP Typology was applied to the school support programs in all the states and classified both state and local funds into five levels of equalization for the school year 1968-69. The levels of equalization range from Level 0 to Level 4. Level

TABLE 4-3

MEAN EQUALIZATION SCORES IN THE MAJOR GEOGRAPHICAL REGIONS IN THE UNITED STATES AND EQUALIZATION SCORES OF THE STATES BASED ON THE NEFP TYPOLOGY FOR THE SCHOOL YEAR, 1968-69

Region and State	*Score*
United States	5.131
New England	4.570
Connecticut	2.295
Maine	4.804
Massachusetts	4.536
New Hampshire	3.091
Rhode Island	6.862
Vermont	5.834
Great Lakes	4.922
Illinois	5.398
Indiana	3.704
Michigan	3.844
Ohio	5.882
Wisconsin	5.781
Plains	4.125
Iowa	4.042
Kansas	3.820
Minnesota	4.433
Missouri	3.852
Nebraska	5.378
North Dakota	3.931
South Dakota	3.420
Rocky Mountains	5.677
Colorado	3.571
Idaho	6.318
Montana	4.810
Utah	7.143
Wyoming	6.543
Alaska	6.628
Hawaii	8.400
Mideast	5.375
Delaware	6.202
Maryland	5.092
New Jersey	3.754
New York	5.957
Pennsylvania	5.870
Southeast	5.521
Alabama	6.220
Arkansas	3.647
Florida	5.995
Georgia	6.103
Kentucky	6.042
Louisiana	5.929
Mississippi	5.744
North Carolina	6.148
South Carolina	5.235
Tennessee	4.521
Virginia	5.085
West Virginia	5.578
Southwest	4.731
Arizona	4.355
New Mexico	5.915
Oklahoma	3.691
Texas	4.963
Far West	5.131
California	4.841
Nevada	4.779
Oregon	4.535
Washington	6.368

0 provides little or no equalization, whereas Level 4 at the other end of the continuum, takes into consideration the taxpaying ability of the local school districts and variation in educational needs of the student population. The state, local, and total state and local funds including the percentage of funds for each state was calculated for each level of equalization. For the purpose of comparison, an equalization scoring technique was developed and applied to the percentage of total state and local funds in each of the five levels for each of the states. As previously noted, the equalization scores should not, under any circumstances, be used to determine the evaluation of a state's complete financial pro-

TABLE 4-4

RANKING AND MEAN EQUALIZATION SCORES OF THE MAJOR GEOGRAPHICAL REGIONS[a] IN THE UNITED STATES BASED ON THE NEFP TYPOLOGY FOR THE SCHOOL YEAR, 1968-69

Rank	*Region*[a]	*Score*
1	Rocky Mountains	5.677
2	Southeast	5.521
3	Mideast	5.375
4	Far West	5.131
5	Great Lakes	4.922
6	Southwest	4.731
7	New England	4.570
8	Plains	4.125

[a] Hawaii and Alaska are omitted.

gram. It can only be termed significant to the extent that state and local funds are being used to equalize the financial resources available for education in a state.

Furthermore, the central staff of the National Educational Finance Project had great difficulty in classifying certain school funds in some states. It is possible that a few funds have been improperly classified but it is not believed that errors in classification of funds are great enough to significantly affect the scores of any state. Researchers might also question the weights assigned to different levels of equalization. That is, some researchers might want to widen the scores between levels of equalization and others might want to narrow the ranges. However, changing the range of weights would not seriously affect the ranking of the states.

As mentioned previously, this study provides those persons concerned with financial equalization of educational opportunity with a method for comparing future progress in equalization with the school year, 1968-69. It is an objective measure of the level of equalization in each state and the nation and can be used as a bench mark by which progress toward equalization can be measured in subsequent years. Most important, it is a step in the development of manageable standards for the equalization of educational opportunity. By using the NEFP Typology, it is possible to determine whether a proposed change in a state's school support program (or even a specific fund) tends to pro-

TABLE 4-5

ALABAMA
1968-69

State Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Minimum Program Fund			169,739,931		2,950,283	172,690,214
Public School Fund					12,694,929	12,694,929
Vocational Education Fund			8,383,171			8,383,171
Textbook Fund			2,078,500			2,078,500
Training Exceptional Children			318,690			318,690
Driver Training Program			203,333			203,333
Illiteracy			100,000			100,000
Total State Funds			180,823,625		15,645,212	196,468,837
Percent Each Level	0.0	0.0	92.0	0.0	8.0	
Local Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Required Minimum Effort					4,676,485	4,676,485
Additional Local Funds	59,008,663					59,008,663
Total Local Funds	59,008,663				4,676,485	63,685,148
Percent Each Level	92.7	0.0	0.0	0.0	7.3	
TOTAL STATE & LOCAL FUNDS	59,008,663		180,823,625		20,321,697	260,153,985
PERCENT EACH LEVEL	22.7	0.0	69.5	0.0	7.8	

TABLE 4-6

ALASKA
1968-69

State Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Public School Fund			24,936,176		1,062,924	25,999,100
Public School Fund			15,349,600			15,349,600
Transportation Fund			2,935,000			2,935,000
Tobacco Tax Fund	81,000	1,535,700				1,616,700
Vocational Education Fund			1,616,000			1,616,000
School Lunch & Milk Fund		232,100				232,100
Tuition Fund			242,300			242,300
Correspondence Study Course			77,500			77,500
Total State Funds	81,000	1,767,800	45,156,576		1,062,924	48,068,300
Percent Each Level	0.2	3.7	93.9	0.0	2.2	
Local Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Required Minimum Effort					6,768,542	6,768,542
Additional Local Funds	10,335,458					10,335,458
Total Local Funds	10,335,458				6,768,542	17,104,000
Percent Each Level	60.4	0.0	0.0	0.0	39.6	
TOTAL STATE & LOCAL FUNDS	10,416,458	1,767,800	45,156,576		7,831,466	65,172,300
PERCENT EACH LEVEL	16.0	2.7	69.3	0.0	12.0	

TABLE 4-7

ARIZONA
1968-69

State Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Basic Grant		67,698,543				67,698,543
Financial Assistance		57,519,853		9,856,571		67,376,424
State Equalization				11,476,464		11,476,464
Homebound			35,642			35,642
Special Education			924,825			924,825
Trainable Retarded			392,062			392,062
Assistance to Districts			74,119			74,119
Night School			5,910			5,910
Endowment Earnings		4,659,113				4,659,113
Total State Funds		129,877,509	1,432,558	21,333,035		152,643,102
Percent Each Level	0.0	85.1	0.9	14.0	0.0	
Local Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Required Minimum Effort				5,185,243		5,185,243
Additional Local Funds	89,093,178					89,093,178
Total Local Funds	89,093,178			5,185,243		94,278,421
Percent Each Level	94.5	0.0	0.0	5.5	0.0	
TOTAL STATE & LOCAL FUNDS	89,093,178	129,877,509	1,432,558	26,518,278		246,921,523
PERCENT EACH LEVEL	36.1	52.6	0.6	10.7	0.0	

TABLE 4-8

ARKANSAS
1968-69

State Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Minimum Foundation Program		82,575,000				82,575,000
Equalizing Transportation Fund					7,100,714	7,100,714
Public School Flat Grant		1,423,921				1,423,921
Free Textbook Fund			1,508,000			1,508,000
Vocational Education Fund			1,025,000			1,025,000
Education for Mentally & Physically Handicapped Children			400,000			400,000
County School Supervisor's Salary Fund		344,550				344,550
Audio-Visual Educational Fund			80,000			80,000
Orphan's Aid Fund			52,690			52,690
Adult Education Fund			75,000			75,000
Total State Funds		84,343,471	3,140,690		7,100,714	94,584,875
Percent Each Level	0.0	89.2	3.3	0.0	7.5	
Local Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Required Minimum Effort	87,225,642					87,225,642
Additional Local Funds						
Total Local Funds	87,225,642					87,225,642
Percent Each Level	100.0	0.0	0.0	0.0	0.0	
TOTAL STATE & LOCAL FUNDS	87,225,642	84,343,471	3,140,690		7,100,714	181,810,517
PERCENT EACH LEVEL	48.0	46.4	1.7	0.0	3.9	

TABLE 4-9

CALIFORNIA 1968-69

State Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Basic Aid & Equalization Aid	60,640,875			929,447,694		990,088,569
Education of Exceptional Child.			109,395,780			109,395,780
Supplemental Aid				15,650,070		15,650,070
County School Educational Services		17,799,098				17,799,098
Adult Education					21,319,904	21,319,904
Special Elementary School Reading Instructional Prog.			11,000,000			11,000,000
Transportation—Home to School			19,086,819			19,086,819
Driver Training			11,404,886			11,404,886
Free Textbooks			21,260,092			21,260,092
Children's Centers			13,606,702			13,606,702
Pre-School Compensatory Educational Programs			4,107,384			4,107,384
Physical Therapists in Special Education Classes			2,469,608			2,469,608
Compensatory Education			11,000,000			11,000,000
Instructional Television			647,018			647,018
Vocational Education			1,030,271			1,030,271
State Construction Project Areas			246,624			246,624
Emergencies in Local Areas				1,174		1,174
Special English			50,000			50,000
Grants to Teachers for Educational Advancement		150,000				150,000
Total State Funds	60,640,875	17,949,098	205,305,184	945,098,938	21,319,904	1,250,313,999
Percent Each Level	4.9	1.4	16.4	75.6	1.7	
Local Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Required Minimum Effort				849,986,291		849,986,291
Additional Local Funds	1,035,644,589					1,035,644,589
Total Local Funds	1,035,644,589			849,986,291		1,885,630,880
Percent Each Level	54.9	0.0	0.0	45.1	0.0	
TOTAL STATE & LOCAL FUNDS	1,096,285,464	17,949,098	205,305,184	1,795,085,229	21,319,904	3,135,944,879
PERCENT EACH LEVEL	35.0	0.6	6.5	57.2	0.7	

TABLE 4-10

COLORADO 1968-69

State Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
State Public School Fund (Minimum Equalization Portion)		30,558,643		19,642,949		50,201,592
Public School Property Tax Relief		27,797,487				27,797,487
Public School Transportation Fund			4,699,517			4,699,517
Physically and Mentally Handicapped			4,000,000			4,000,000
State Public School Fund— Small Attendance			1,082,120			1,082,120
State Public School Fund— Excess Growth			493,480			493,480
State Public School Fund-- Contingency Reserve				234,594		234,594
Migrant Children Education Fund			165,000			165,000
Total State Funds		58,356,130	10,440,117	19,877,543		88,673,790
Percent Each Level	0.0	65.8	11.8	22.4	0.0	

Local Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Required Minimum Effort	183,353,165					80,390,901
Additional Local Funds				80,390,901		183,353,165
Total Local Funds	183,353,165			80,390,901		263,744,066
Percent Each Level	69.5	0.0	0.0	30.5	0.0	
TOTAL STATE & LOCAL FUNDS	183,353,165	58,356,130	10,440,117	100,268,444		352,417,856
PERCENT EACH LEVEL	52.0	16.6	3.0	28.4	0.0	

TABLE 4-11

CONNECTICUT 1968-69

State Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Per Pupil Aid Fund		98,217,767				98,217,767
School Building Aid Fund			20,582,909			20,582,909
Transportation Fund			5,490,013			5,490,013
State Aid for Disadvantaged Children Fund			6,913,299			6,913,299
Special Education Fund			7,344,674			7,344,674
Vocational School & Vocational Agricultural Center Transportation Fund			472,773			472,773
Vocational Education & Industrial Arts			372,739			372,739
State Aid for Occupational Transportation Fund			298,440			298,440
Driver Education Grant Fund			298,570			298,570
Adult Education Fund			295,703			295,703
Pupils Residing on Tax-Exempt State Property Fund				398,081		398,081
School Library Grant Fund			199,754			199,754
Vocational Agriculture Tuition Fund			390,121			390,121
Total State Funds		98,217,767	42,658,995	398,081		141,274,843
Percent Each Level	0.0	69.5	30.2	0.3	0.0	
Local Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Required Minimum Effort						
Additional Local Funds	367,451,667					367,451,667
Total Local Funds	367,451,667					367,451,667
Percent Each Level	100.0	0.0	0.0	0.0	0.0	
TOTAL STATE & LOCAL FUNDS	367,451,667	98,217,767	42,658,995	398,081		508,726,510
PERCENT EACH LEVEL	72.2	19.3	8.4	0.1		

TABLE 4-12

DELAWARE 1968-69

State Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Current Expenditures & Minor Capital Outlay Fund			63,406,913			63,406,913
Transportation Fund			2,915,000			2,915,000
School Construction Fund			10,643,200			10,643,200
Total State Funds			76,965,113			76,965,113
Percent Each Level	0.0	0.0	100.0	0.0	0.0	
Local Fund	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Required Minimum Effort	23,655,243					23,655,243
Additional Local Funds						
Total Local Funds	23,655,243					23,655,243
Percent Each Level	100.0	0.0	0.0	0.0	0.0	
TOTAL STATE & LOCAL FUNDS	23,655,243		76,965,113			100,620,356
PERCENT EACH LEVEL	23.5	0.0	76.5	0.0	0.0	

TABLE 4-13

FLORIDA 1968-69

State Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Minimum Foundation Program			440,496,336		29,435,753	469,932,089
County Capital Outlay & Debt Service Program			23,557,548			23,557,548
County School Sales Tax Trust Fund			29,988,776			29,988,776
County School Additional Capital Outlay Trust Fund	4,916,400	14,749,200				19,665,600
Racing Commission Fund	9,209,849					9,209,849
State Textbook Fund			8,625,685			8,625,685
Vocational Technical & Adult Education, Special Post Secondary Fund			1,218,000			1,218,000
Exceptional Children Educational Equipment Fund	67,000		1,424,375			1,491,375
Exceptional Children Educational Facilities Fund			2,500,000			2,500,000
Vocational/Technical Center Construction Fund			4,913,406			4,913,406
Public School Driver Educational Fund			1,924,478			1,924,478
Total State Funds	14,193,249	14,749,200	514,648,604		29,435,753	573,026,806
Percent Each Level	2.5	2.5	89.9	0.0	5.1	
Local Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Required Minimum Effort					84,151,353	84,151,353
Additional Local Funds	186,683,334					186,683,334
Total Local Funds	186,683,334				84,151,353	270,834,687
Percent Each Level	68.9	0.0	0.0	0.0	31.1	
TOTAL STATE & LOCAL FUNDS	200,876,583	14,749,200	514,648,604		113,587,106	843,861,493
PERCENT EACH LEVEL	23.8	1.7	61.0	0.0	13.5	

TABLE 4-14

GEORGIA 1968-69

State Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Foundation Program Fund			227,364,081		64,402,033	291,766,114
Vocational Educational Fund			7,279,409			7,279,409
Capital Outlay Fund					28,801,000	28,801,000
Total State Funds			234,643,490		93,203,033	327,846,523
Percent Each Level	0.0	0.0	71.6	0.0	28.4	
Local Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Required Minimum Effort					64,046,220	64,046,220
Additional Local Funds	115,940,662					115,940,662
Total Local Funds	115,940,662				64,046,220	179,986,882
Percent Each Level	64.4	0.0	0.0	0.0	35.6	
TOTAL STATE & LOCAL FUNDS	115,940,662		234,643,490		157,249,253	507,833,405
PERCENT EACH LEVEL	22.8	0.0	46.2	0.0	31.0	

TABLE 4-15

HAWAII 1968-69

State Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Operating Funds					93,198,515	93,198,515
Capital Outlay					10,000,000	10,000,000
Total State Funds					103,198,515	103,198,515
Percent Each Level	0.0	0.0	0.0	0.0	100.0	
Local Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Required Minimum Effort						
Additional Local Funds						
Total Local Funds						
Percent Each Level	0.0	0.0	0.0	0.0	0.0	
TOTAL STATE & LOCAL FUNDS					103,198,515	103,198,515
PERCENT EACH LEVEL	0.0	0.0	0.0	0.0	100.0	

TABLE 4-16

IDAHO 1968-69

State Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Foundation Education & Transportation Program	4,957,404		11,287,502		16,677,398	32,922,304
Driver Education			639,513			639,513
Total State Funds	4,957,404		11,927,015		16,677,398	33,561,817
Percent Each Level	14.8	0.0	35.5	0.0	49.7	
Local Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Required Minimum Effort					27,913,820	27,913,820
Additional Local Funds	12,560,482					12,560,482
Total Local Funds	12,560,482				27,913,820	40,474,302
Percent Each Level	31.0	0.0	0.0	0.0	69.0	
TOTAL STATE & LOCAL FUNDS	17,517,886		11,927,015		44,591,218	74,036,119
PERCENT EACH LEVEL	23.7	0.0	16.1	0.0	60.2	

TABLE 4-17

ILLINOIS 1968-69

State Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Common School Fund & Distributing Fund—Equalization Aid				263,806,258		263,806,258
General Aid Portion	14,600,000			83,270,409		97,870,409
County Superintendent's Salaries		1,360,000				1,360,000
Assistant County Superintendent's Salaries		1,057,000				1,057,000
Supervisory Expense Fund	102,000					102,000
Orphanages & Children's Homes		1,112,500				1,112,500
State Owned Housing Portion		250,000				250,000
Military Claims		3,625,000				3,625,000
Tax Equipment Grants	100,000					100,000
Pupil Transportation Fund			10,865,000			10,865,000
County Board of School Trustees		20,400				20,400
Driver Education Fund			5,750,000			5,750,000
Adult Education			3,289,625			3,289,625
Special Education for Handicapped Children			19,282,851			19,282,851
Special Education Facilities			1,900,000			1,900,000
Gifted Children Fund			4,500,000			4,500,000
Pupil Transportation Separate Appropriation	3,695,724					3,695,724
Vocational Education & Rehabilitation			8,955,004			8,955,004
Total State Funds	18,497,724	7,424,900	54,542,480	347,076,667		427,541,771
Percent Each Level	4.3	1.7	12.8	81.2	0.0	

Local Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Required Minimum Effort				443,751,803		443,751,803
Additional Local Funds	278,432,028					278,432,028
Total Local Funds	278,432,028			443,751,803		722,183,831
Percent Each Level	38.6	0.0	0.0	61.4	0.0	
TOTAL STATE & LOCAL FUNDS	296,929,752	7,424,900	54,542,480	790,828,470		1,149,725,602
PERCENT EACH LEVEL	25.8	0.6	4.8	68.8	4.18	4.19

TABLE 4-18

INDIANA 1968-69

State Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
State School Support Fund—Tuition Portion			9,827,799		170,018,431	179,846,230
Property Tax Relief Fund		33,600,000				33,600,000
State School Support Fund Transportation Portion			14,190,713			14,190,713
State School Support Fund —Intangible Tax Revenue	9,750,000					9,750,000
State School Support Fund —Corporate Net Income		13,000,000				13,000,000
State School Support Fund —Other Current Expenses				4,927,893		4,927,893
State School Support Fund —Summer Education Portion			3,282,371			3,282,371
Special Education for Handicapped Child Fund			4,175,338			4,175,338
Vocational Education Fund			1,200,000			1,200,000
State School Support Fund Adult Evening School Portion			856,499			856,499
Transportation Tuition for Children of State Employees Living on State Property		116,398				116,398
Tuition for Classes in Tuberculosis Sanitariums			11,499			11,499
Total State Funds	9,750,000	46,716,398	33,544,219	4,927,893	170,018,431	264,956,941
Percent Each Level	3.7	17.6	12.7	1.9	64.1	
Local Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Required Minimum Effort					72,148,617	72,148,617
Additional Local Funds	471,976,985					471,976,985
Total Local Funds	471,976,985				72,148,617	544,125,602
Percent Each Level	86.7	0.0	0.0	0.0	13.3	
TOTAL STATE & LOCAL FUNDS	481,726,985	46,716,398	33,544,219	4,927,893	242,167,048	809,082,543
PERCENT EACH LEVEL	59.5	5.8	4.1	0.6	30.0	

TABLE 4-19

IOWA 1968-69

State Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
State Equalization Aid Fund		47,798,863		64,201,137		112,000,000
Income Tax Proceeds				34,457,160		34,457,160
General Aid Fund			6,000,000			6,000,000
Vocational Education Operation Fund			6,000,000			6,000,000
Handicapped Children's Aid Fund			3,500,000			3,500,000
Driver Education Fund			1,700,000			1,700,000
Emergency Aid Fund				50,000		50,000
Semi-Annual Apportionment Fund		147,508				147,508
Children in State Institution Tuition in Charitable Institutions			150,000			150,000
Capital Outlay Fund			4,750,000			4,750,000
Total State Funds		47,946,371	22,100,000	98,708,297		168,754,668
Percent Each Level	0.0	28.4	13.1	58.5	0.0	
Local Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Required Minimum Effort				37,333,333		37,333,333
Additional Local Funds	166,983,298					166,983,298
Total Local Funds	166,983,298			37,333,333		204,316,631
Percent Each Level	81.7	0.0	0.0	18.3	0.0	
TOTAL STATE & LOCAL FUNDS	166,983,298	47,946,371	22,100,000	136,041,630		373,071,299
PERCENT EACH LEVEL	44.8	12.8	5.9	36.5	0.0	

TABLE 4-20

KANSAS 1968-69

State Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
State School Foundation Fund		28,382,888		63,017,112		91,400,000
Local Ad Valorem Tax Reduction Fund		7,288,586				7,288,586
Special Education Fund			2,251,969			2,251,969
Annual School Fund				1,594,894		1,594,894
Driver Training Fund			675,000			675,000
Vocational Education Fund			578,000			578,000
State Area Vocational Technical			1,544,317			1,544,317
Total State Funds		35,671,474	5,049,286	64,612,006		105,332,766
Percent Each Level	0.0	33.9	4.8	61.3	0.0	
Local Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Required Minimum Effort				57,179,120		57,179,120
Additional Local Funds	158,510,023					158,510,023
Total Local Funds	158,510,023			57,179,120		215,689,143
Percent Each Level	73.5	0.0	0.0	26.5	0.0	
TOTAL STATE & LOCAL FUNDS	158,510,023	35,671,474	5,049,286	121,971,126		321,021,909
PERCENT EACH LEVEL	49.4	11.1	1.6	37.9	0.0	

TABLE 4-21

KENTUCKY 1968-69

State Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Foundation Program Fund			124,264,472		51,892,339	176,156,811
Free Textbook Fund			2,600,000			2,600,000
Total State Funds			126,864,472		51,892,339	178,756,811
Percent Each Level	0.0	0.0	71.0	0.0	29.0	
Local Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Required Minimum Effort					57,423,024	57,423,024
Additional Local Funds	74,222,014					74,222,014
Total Local Funds	74,222,014				57,423,024	131,645,038
Percent Each Level	56.4	0.0	0.0	0.0	43.6	
TOTAL STATE & LOCAL FUNDS	74,222,014		126,864,472		109,315,363	310,401,849
PERCENT EACH LEVEL	23.9	0.0	40.9	0.0	35.2	

TABLE 4-22

LOUISIANA 1968-69

State Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Public School Fund—Equalization Portion			31,966,531		230,001,519	261,968,050
School Lunch Fund		12,352,694				12,352,694
Public School Fund per Educable Portion		7,500,000				7,500,000
Textbooks and Supplies Fund			7,876,297			7,876,297
Crippled & Exceptional Children's Programs			137,275			137,275
Regular Vocational Education Fund			908,729			908,729
Salary Adjustment to Agriculture Teachers			326,000			326,000
Adult Academic Educational Fund			339,761			339,761
Driver Education Fund			286,092			286,092
Community Food Preservation Units			1,361,921			1,361,921
Interest on Free School Fund	108,183					108,183
Special Vocational Facilities Fund			147,551			147,551
Total State Funds	108,183	19,852,694	43,350,157		230,001,519	293,312,553
Percent Each Level	0.0	6.8	14.8	0.0	78.4	
Local Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Required Minimum Effort					39,602,995	39,602,995
Additional Local Funds	134,325,972					134,325,972
Total Local Funds	134,325,972				39,602,995	173,928,967
Percent Each Level	77.2	0.0	0.0	0.0	22.8	
TOTAL STATE & LOCAL FUNDS	134,434,155	19,852,694	43,350,157		269,604,514	467,241,520
PERCENT EACH LEVEL	28.8	4.2	9.3	0.0	57.7	

TABLE 4-23

MAINE 1968-69

State Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
State Support of Foundation Program Fund	3,502,194			31,299,485		34,801,679
State Aid for School Construction Fund	104,688				3,895,312	4,000,000
Supplemental State Aid for Reorganizing Districts Fund		1,848,300				1,848,300
Special Education of Physically Handicapped or Exceptional Children Fund			650,000			650,000
Schooling of Children in Unorganized Territory Fund		717,340				717,340
Superintendents of School Unions Fund		27,960				27,960
State Vocational Education Fund			190,024			190,024
Regional Technical Vocational Centers			512,000			512,000
Driver Education Fund			120,000			120,000
Evening Schools Fund			93,000			93,000
Interest on Plantations Fund		25,000				25,000
Permanent School Fund Inter. Fund		17,000				17,000
Secondary Education of Island Child Fund		10,000				10,000
Professional Credits for Teachers of Mentally Retarded Children Fund		3,500				3,500
Total State Funds	3,606,882	2,649,100	1,565,024	31,299,485	3,895,312	43,015,803
Percent Each Level	8.4	6.2	3.6	72.8	9.0	
Local Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Required Minimum Effort				39,405,617		39,405,617
Additional Local Funds	41,517,915					41,517,915
Total Local Funds	41,517,915			39,405,617		80,923,532
Percent Each Level	51.3	0.0	0.0	48.7	0.0	
TOTAL STATE & LOCAL FUNDS	45,124,797	2,649,100	1,565,024	70,705,102	3,895,312	123,939,335
PERCENT EACH LEVEL	36.4	2.1	1.3	57.1	3.1	

TABLE 4-24

MARYLAND 1968-69

State Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Aid to Educational State Share of Current Expenses	20,818,712	17,845,585		86,366,163		125,030,460
Aid to Education Transportation Fund			21,200,000			21,200,000
Aid to Education—School Building Construction Aid			50,500,000			50,500,000
Aid to Education—Handicapped Children Fund			17,500,000			17,500,000
Aid to Education—Current Expense Fund Incentive Fund		446,600		7,253,000		7,700,000
Aid to Education—Driver Education Fund			725,000			725,000
Aid to Education—Adult Education Fund			813,872			813,872
Total State Funds	20,818,712	18,292,185	90,738,872	93,619,563		223,469,332
Percent Each Level	9.3	8.2	40.6	58.8	0.0	
Local Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Required Minimum Effort				218,770,752		218,770,752
Additional	153,145,019					153,145,019
Total Local Funds	153,145,019			218,770,752		371,915,771
Percent Each Level	41.2	0.0	0.0	58.8	0.0	
TOTAL STATE & LOCAL FUNDS	173,963,731	18,292,185	90,738,872	312,390,315		595,385,103
PERCENT EACH LEVEL	29.2	3.1	15.2	52.5	0.0	

Table 4-25

Massachusetts 1968-69

State Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
School Aid Fund	6,095,782			105,976,558		112,072,340
School Construction Grant for C.O. & D.S. Fund					23,568,473	23,568,473
Transportation Expense Fund			10,631,448			10,631,448
Special Education Fund			9,587,046			9,587,046
School Lunch Fund		3,636,476				3,636,476
State Wards Fund			1,215,386			1,215,386
Vocational Educational			828,615			828,615
Total State Funds	6,095,782	3,636,476	22,262,495	105,976,558	23,568,473	161,539,784
Percent Each Level	3.8	2.2	13.8	65.6	14.6	
Local Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Required Minimum Effort				362,917,134		362,917,134
Additional Local Funds	357,431,361					357,431,361
Total Local Funds	357,431,361			362,917,134		720,348,495
Percent Each Level	49.6	0.0	0.0	50.4	0.0	
TOTAL STATE & LOCAL FUNDS	363,527,143	3,636,476	22,262,495	468,893,692	23,568,473	881,888,279
PERCENT EACH LEVEL	41.2	0.4	2.5	53.2	2.7	

TABLE 4-26

MICHIGAN 1968-69

State Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
School Aid Fund—Foundation Portion	129,072,335			450,692,335		579,764,670
School Aid Fund—Special Education Portion			30,000,000			30,000,000
Special Aid Fund			8,300,000			8,300,000
School Aid Fund—Intermediate District's Portion	3,250,000					3,250,000
Total State Funds	132,322,335		38,300,000	450,692,335		621,314,670
Percent Each Level	21.3	0.0	6.2	72.5	0.0	
Local Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Required Minimum Effort				187,777,165		187,777,165
Additional Local Funds	607,136,635					607,136,635
Total Local Funds	607,136,635			187,777,165		794,913,800
Percent Each Level	76.4	0.0	0.0	23.6	0.0	
TOTAL STATE & LOCAL FUNDS	739,458,970		38,300,000	638,469,500		1,416,228,470
PERCENT EACH LEVEL	52.2	0.0	2.7	45.1	0.0	

TABLE 4-27

MINNESOTA 1968-69

State Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Foundation Program Aid	18,385,693			185,137,105		203,522,798
Transportation Aid			19,397,462			19,397,462
Vocational Aid			11,672,376			11,672,376
Aid for Special Classes of Handicapped and Trainable Children			9,780,180			9,780,180
Emergency Aid				2,200,426		2,200,426
County Equalization Aid				200,000		200,000
Endowment Income Fund				9,690,324		9,690,324
Income Tax School Aid				8,940,760		8,940,760
Community School Lunch		500,000				500,000
Tax Relief		43,418,674				43,418,674
Gross Earnings Refund	1,560,000					1,560,000
Aid in Lieu of State Trust Fund Land	50,000					50,000
Aid in Lieu of Non-Taxable Land	375,000					375,000
Airport Refund	120,000					120,000
Additional Aid to Districts with Decreasing Auditor's Assistance Valuation	750,000					750,000
Total State Funds	21,240,693	43,918,674	40,850,018	206,168,615		312,178,000
Percent Each Level	6.8	14.1	13.1	66.0	0.0	
Local Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Required Minimum Effort				99,920,650		99,920,650
Additional Local Funds	236,940,347					236,940,347
Total Local Funds	236,940,347			99,920,650		336,860,997
Percent Each Level	70.3	0.0	0.0	29.7	0.0	
TOTAL STATE & LOCAL FUNDS	258,181,040	43,918,674	40,850,018	306,089,265		649,038,997
PERCENT EACH LEVEL	39.7	6.8	6.3	47.2	0.0	

TABLE 4-28

MISSISSIPPI 1968-69

State Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Minimum Foundation Program Fund			112,112,229		20,748,984	132,861,213
Homestead Exemption Fund		8,900,000				8,900,000
State Public School Building Fund		6,600,000				6,600,000
Common School Fund		5,000,000				5,000,000
Vocational Education Fund			5,183,800			5,183,800
State Textbook Fund			2,525,000			2,525,000
Chickasaw School Fund		62,000				62,000
Total State Funds		20,562,000	119,821,029		20,748,984	161,132,013
Percent Each Level	0.0	12.8	74.4	0.0	12.8	
Local Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Required Minimum Effort					17,625,000	17,625,000
Additional Local Funds	55,793,884					55,793,884
Total Local Funds	55,793,884				17,625,000	73,418,884
Percent Each Level	76.0	0.0	0.0	0.0	24.0	
TOTAL STATE & LOCAL FUNDS	55,793,884	20,562,000	119,821,029		38,373,984	234,550,897
PERCENT EACH LEVEL	23.8	8.8	51.1	0.0	16.3	

TABLE 4-29

MISSOURI 1968-69

State Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
State School Monies Fund (E.Q., T.P. & A.A.)		145,178,527		18,425,148		163,603,675
State School Monies Fund Transportation			16,917,016			16,917,016
State School Monies Fund Equalization 2nd Level Portion				6,141,716		6,141,716
Reorganization Building Aid Fund			1,750,000			1,750,000
Vocational Education Fund			5,411,235			5,411,235
City Teacher Training Fund	1,060,163					1,060,163
State School Monies Fund Orphan Aid Portion			65,000			65,000
State School Monies Fund School Abandonment Aid		30,000				30,000
Central Building Aid Fund		20,000				20,000
Total State Funds	1,060,163	145,228,527	24,143,251	24,566,864		194,998,805
Percent Each Level	0.5	74.5	12.4	12.6	0.0	
Local Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Required Minimum Effort				91,555,757		91,555,757
Additional Local Funds	235,387,640					235,387,640
Total Local Funds	235,387,640			91,555,757		326,943,397
Percent Each Level	72.0	0.0	0.0	28.0	0.0	
TOTAL STATE & LOCAL FUNDS	236,447,803	145,228,527	24,143,251	116,122,621		521,942,202
PERCENT EACH LEVEL	45.3	27.8	4.6	22.3	0.0	

TABLE 4-30

MONTANA 1968-69

State Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
State Equalization Aid			4,436,119		18,563,881	23,000,000
Interest & Income					9,500,000	9,500,000
Transportation Aid			1,200,000			1,200,000
Driver Education Aid			100,000			100,000
Vocational Education Aid			450,000			450,000
Total State Funds			6,186,119		28,063,881	34,250,000
Percent Each Level	0.0	0.0	18.1	0.0	81.9	
Local Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Required Minimum Effort					33,153,401	33,153,401
Additional Local Funds	59,846,599					59,846,599
Total Local Funds	59,846,599				33,153,401	93,000,000
Percent Each Level	64.0	0.0	0.0	0.0	35.6	
TOTAL STATE & LOCAL	59,846,599		6,186,119		61,217,282	127,250,000
PERCENT EACH LEVEL	47.0	0.0	4.9	0.0	48.1	

TABLE 4-31

NEBRASKA 1968-69

State Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
State Foundation & Equalization Fund	160,926	2,552,867			32,286,208	35,000,001
Temporary School Fund Census Variable Portion	29,560				2,322,742	2,352,302
Insurance Premium Tax Fund	21,573				1,697,427	1,719,000
Temporary School Fund District Construction	102,301				681,761	784,062
Special Education Fund			1,102,244			1,102,244
Temporary School Fund In Lieu of School Land Tax Portion	5,846				457,973	463,819
Driver Education Fund			543,458			543,458
Vocational Education Fund			62,000			62,000
Total State Funds	320,206	2,552,867	1,707,702		37,446,111	42,026,886
Percent Each Level	0.8	6.1	4.0	0.0	89.1	
Local Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Required Minimum Effort					71,064,203	71,064,203
Additional Local Funds	74,503,635					74,503,635
Total Local Funds	74,503,635				71,064,203	145,567,838
Percent Each Level	51.2	0.0	0.0	0.0	48.8	
TOTAL STATE & LOCAL FUNDS	74,823,841	2,552,867	1,707,702		108,510,314	187,594,724
PERCENT EACH LEVEL	39.9	1.4	0.9	0.0	57.8	

TABLE 4-32

NEVADA 1968-69

State Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Distributive School Fund				27,753,079		27,753,079
Emergency Special Aid	21,708					21,708
School Building for Carson City	259,128					259,128
Driver Education			98,703			98,703
Total State Funds	280,836		98,703	27,753,079		28,132,618
Percent Each Level	1.0	0.0	0.4	98.6	0.0	
Local Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Required Minimum Effort				23,177,077		23,177,077
Additional Local Funds	29,742,271					29,742,271
Total Local Funds	29,742,271			23,177,077		52,919,348
Percent Each Level	56.2	0.0	0.0	43.8	0.0	
TOTAL STATE & LOCAL FUNDS	30,023,107		98,703	50,930,156		81,051,966
PERCENT EACH LEVEL	37.0	0.0	0.1	62.9	0.0	

TABLE 4-33

NEW HAMPSHIRE 1968-69

State Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Foundation Aid Fund				4,280,178		4,280,178
School Building Aid Fund	2,789,232					2,789,232
Sweepstakes Aid Fund		890,122				890,122
Education for the Deaf Children Fund			292,890			292,890
Statewide Supervision Fund			294,350			294,350
Intellectually Retarded Children Fund			150,000			150,000
Physically Handicapped Children Fund			59,100			59,100
Area Vocational Schools Fund			50,000			50,000
Educational in Unorganized Areas				12,956		12,956
Emotionally Disturbed Children			20,000			20,000
School District Reorganization Aid		450,000				450,000
Total State Funds	2,789,232	1,340,122	866,340	4,293,134		9,288,828
Percent Each Level	30.0	14.4	9.3	46.3	0.0	
Local Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Required Minimum Effort				25,842,132		25,842,132
Additional Local Funds	55,873,786					55,873,786
Total Local Funds	55,873,786			25,842,132		81,715,918
Percent Each Level	68.4	0.0	0.0	31.6	0.0	
TOTAL STATE & LOCAL FUNDS	58,663,018	1,340,122	866,340	30,135,266		91,004,746
PERCENT EACH LEVEL	64.5	1.5	0.9	33.1	0.0	

TABLE 4-34

NEW JERSEY 1968-69

State Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Minimum Aid Fund & Equalization Aid Fund	49,785,525			117,350,857		167,136,382
School Building Aid Fund				28,579,377		28,579,377
Transportation Fund			23,400,096			23,400,096
Atypical Pupil Fund			16,052,227			16,052,227
Large Cities Fund			5,179,275			5,179,275
Vocational Education			4,000,000			4,000,000
School Lunch		4,000,000				4,000,000
Helping Teachers, County Attendance Officers & Supervisors of Child Study		1,195,023				1,195,023
Emergency Building Aid Fund				1,000,000		1,000,000
Public School Safety Act		1,000,000				1,000,000
Vocational Evening School Fund	559,720					559,720
Salaries of County Superintendents Fund		409,617				409,617
Adult Education			275,000			275,000
Emergency Aid Fund				175,000		175,000
Resident in Institutions			122,340			122,340
Technical Education			100,000			100,000
Resident on State-owned Property				100,000		100,000
Evening School Foreign Born	90,000					90,000
Work Study Program			75,000			75,000
Industrial Education	71,000					71,000
County A/V Aids Centers	50,000					50,000
Manpower Development & Training			200,000			200,000
Total State Funds	50,556,245	6,604,640	49,403,938	147,205,234		253,770,057
Percent Each Level	19.9	2.6	19.5	58.0	0.0	
Local Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Required Minimum Effort				432,681,943		432,681,943
Additional Local Funds	677,567,136					677,567,136
Total Local Funds	677,567,136			432,681,943		1,110,249,079
Percent Each Level	61.0	0.0	0.0	39.0	0.0	
TOTAL STATE & LOCAL FUNDS	728,123,381	6,604,640	49,403,938	579,887,177		1,364,019,136
PERCENT EACH LEVEL	53.4	0.5	3.6	42.5	0.0	

TABLE 4-35

NEW MEXICO 1968-69

State Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Public School Equalization Fund—Basic Support District			73,899,839			73,899,839
Current School Fund District		20,000,000				20,000,000
Public School Equalization Minimum Support District					379,499	379,499
Public School Equalization Transportation Portion			7,550,000			7,550,000
Public School Equalization Qualification District		1,663,200				1,663,200
Public School Equalization Classroom Teaching Experimental District		4,042,100				4,042,100
Public School Equalization Driver Education District			268,364			268,364
Public School Equalization Chief's Discretionary District	234,501					234,501
Public School Equalization Instructional Personnel		6,463,019				6,463,019
Textbook Fund			2,047,604			2,047,604
Total State Funds	234,501	32,168,319	83,765,807		379,499	116,548,126
Percent Each Level	0.2	27.6	71.9	0.0	0.3	
Local Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Required Minimum Effort						
Additional Local Funds	23,231,895					23,231,895
Total Local Funds	23,231,895					23,231,895
PERCENT EACH LEVEL	100.0	0.0	0.0	0.0	0.0	
TOTAL STATE & LOCAL FUNDS	23,466,396	32,168,319	83,765,807		379,499	139,780,021
PERCENT EACH LEVEL	16.8	23.0	59.9	0.0	0.3	

TABLE 4-36

NEW YORK 1968-69

State Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
General Aid	52,766,020		55,744,480		1,750,489,500	1,859,000,000
State Aid for Textbooks			29,000,000			29,000,000
Boards of Cooperative Educational Services				41,400,000		41,400,000
County Vocational & Extension Boards			1,200,000			1,200,000
School Lunch Program Aid		13,000,000				13,000,000
Special Experimental Aids		8,124,300	52,000,000		3,000,000	63,124,300
Total State Funds	52,766,020	21,124,300	137,944,480	41,400,000	1,753,489,500	2,006,724,300
Percent Each Level	2.6	1.0	6.9	2.1	87.4	
Local Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Required Minimum Effort					727,606,020	727,606,020
Additional Local Funds	1,180,393,980					1,180,393,980
Total Local Funds	1,180,393,980				727,606,020	1,908,000,000
Percent Each Level	61.9	0.0	0.0	0.0	38.1	
TOTAL STATE & LOCAL FUNDS	1,233,160,000	21,124,300	137,944,480	41,400,000	2,481,095,520	3,914,724,300
PERCENT EACH LEVEL	31.5	0.5	3.5	1.1	63.4	

TABLE 4-37

NORTH CAROLINA 1968-69

State Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Nine Months School Fund			332,867,393			332,867,393
Vocational Educational Fund			5,418,362			5,418,362
Free Textbook Fund			8,964,481			8,964,481
Driver Training Fund			4,841,416			4,841,416
School Bus Fund			2,843,345			2,843,345
Institution & Training for Trainable Mentally Handicapped Children Fund			1,227,694			1,227,694
Professional Improvement of Teacher's Fund		147,403				147,403
Program of Education by T. V. Fund			114,123			114,123
Total State Funds		147,403	356,276,814			356,424,217
Percent Each Level	0.0	0.0	100.0	0.0	0.0	
Local Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Required Minimum Effort						
Additional Local Funds	114,406,105					114,406,105
Total Local Funds	114,406,105					114,406,105
Percent Each Level	100.0	0.0	0.0	0.0	0.0	
TOTAL STATE & LOCAL FUNDS	114,406,105	147,403	356,276,814			470,830,322
PERCENT EACH LEVEL	24.3	0.0	75.7	0.0	0.0	

TABLE 4-38

NORTH DAKOTA 1968-69

State Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Foundation Program Fund			14,406,044		7,670,956	22,077,000
Tuition Fund		2,665,000				2,665,000
Special Education Fund			450,000			450,000
Vocational Educational Fund			205,000			205,000
Total State Funds		2,665,000	15,061,044		7,670,956	25,397,000
Percent Each Level	0.0	10.5	59.3	0.0	30.2	
Local Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Required Minimum Effort					9,794,778	9,794,778
Additional Local Funds	40,855,896					40,855,896
Total Local Funds	40,855,896				9,794,778	50,650,674
Percent Each Level	80.7	0.0	0.0	0.0	19.3	
TOTAL STATE & LOCAL FUNDS	40,855,896	2,665,000	15,061,044		17,465,734	76,047,674
PERCENT EACH LEVEL	53.7	3.5	19.8	0.0	23.0	

TABLE 4-39

OHIO 1968-69

State Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Foundation Program Fund	103,631,943				339,807,601	443,439,544
Education & Culturally Disadvantaged Fund			8,722,000			8,722,000
Adult Basic Literacy Fund			115,000			115,000
Educational T. V. Contract Service Fund			610,000			610,000
Driver Education Fund			5,250,000			5,250,000
Children in Schools for the Mentally Retarded Fund			142,500			142,500
Permanent School Fund		280,000				280,000
Total State Funds	103,631,943	280,000	14,839,500		339,807,601	458,559,044
Percent Each Level	22.6	.1	3.2	0.0	74.1	
Local Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Required Minimum Effort					644,903,278	644,903,278
Additional Local Funds	404,630,742					404,630,742
Total Local Funds	404,630,742				644,903,278	1,049,534,020
Percent Each Level	38.6	0.0	0.0	0.0	61.4	
TOTAL STATE & LOCAL FUNDS	508,262,685	280,000	14,839,500		984,710,879	1,508,093,064
PERCENT EACH LEVEL	33.7	0.0	1.0	0.0	65.3	

TABLE 4-40

OKLAHOMA 1968-69

State Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Foundation Aid Fund			45,810,572		6,552,140	52,362,712
Incentive Aid Fund		28,505,315				28,505,315
Vocational Education Fund			1,141,676			1,141,676
General Apportionment Fund		3,954,505				3,954,505
State Textbook Fund			2,399,580			2,399,580
Handicapped Child Fund			785,000			785,000
Total State Funds		32,459,820	50,136,828		6,552,140	89,148,788
Percent Each Level	0.0	36.4	56.2	0.0	7.4	
Local Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Required Minimum Effort					50,814,253	50,814,253
Additional	167,985,249					167,985,249
Total Local Funds	167,985,249				50,814,253	218,799,502
Percent Each Level	76.8	0.0	0.0	0.0	23.2	
TOTAL STATE & LOCAL FUNDS	167,985,249	32,459,820	50,136,828		57,366,393	307,948,290
PERCENT EACH LEVEL	54.6	10.5	16.3	0.0	18.6	

TABLE 4-41

OREGON 1968-69

State Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Basic School Support Fund	21,421,898		6,632,313	47,689,057		75,743,268
Common School Fund		1,700,231				1,700,231
Handicapped Children Fund			1,604,313			1,604,313
Mentally Retarded Children Fund			1,186,578			1,186,578
Student Driver Training Fund			587,151			587,151
Vocational Education Fund			125,000			125,000
Educational Able and Gifted Children Fund			15,440			15,440
Disadvantaged Children			618,750			618,750
Aid to Individuals			13,711			13,711
Special Schools					251,055	251,055
State Tax-Exempt Property	114,150					114,150
Total State Funds	21,536,048	1,700,231	10,783,256	47,689,057	251,055	81,959,647
Percent Each Level	26.3	2.1	13.1	58.2	0.3	
Local Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Required Minimum Effort				152,853,587		152,853,587
Additional Local Funds	123,909,952					123,909,952
Total Local Funds	123,909,952			152,853,587		276,763,539
Percent Each Level	44.8	0.0	0.0	55.2	0.0	
TOTAL STATE & LOCAL FUNDS	145,446,000	1,700,231	10,783,256	200,542,644	251,055	358,723,186
PERCENT EACH LEVEL	40.5	0.5	3.0	55.9	0.1	

TABLE 4-42

PENNSYLVANIA 1968-69

State Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
General Fund—Foundation Program	2,628,920				613,342,402	615,971,322
Obligations & Rentals to School Building Authority					47,507,261	47,507,261
Support of Public Schools Special Education Portion			27,185,223			27,185,223
Equalizing Transportation Fund					27,667,614	27,667,614
Vocational Education Fund			11,791,452			11,791,452
Health Services Fund			12,224,838			12,224,838
Education of the Deaf, Blind and Partially Sighted and Palsied			9,310,220			9,310,220
Tuition for the Non-resident Orphans and Easter Child Fund			3,750,419			3,750,419
County Supervising Expense Fund		3,715,000				3,715,000
State Driver's Training Fund			3,277,410			3,277,410
Closed School Fund		2,616,600				2,616,600
Homebound Institution Fund					469,290	469,290
Aid to Financially Distressed Districts Fund				500,000		500,000
Children of Migrant Laborers Education Fund			17,619			17,619
Sanitary Sewage Disposal Plan Operation Fund		216,401				216,401
Payment in Lieu of Taxes Fund	26,491					26,491
Education of the Disadvantaged & Improvement of Substandard Education			733,392			733,392
Total State Funds	2,655,411	6,548,001	68,290,573	500,000	688,986,567	766,980,552
Percent Each Level	0.3	0.9	8.9	0.1	89.8	
Local Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Required Minimum Effort					403,365,598	403,365,598
Additional Local Funds	566,779,489					566,779,489
Total Local Funds	566,779,489				403,365,598	970,145,087
Pecent Each Level	58.4	0.0	0.0	0.0	41.6	
TOTAL STATE & LOCAL FUNDS	569,434,900	6,548,001	68,290,573	500,000	1,092,352,165	1,737,125,639
	32.8	0.4	3.9	0.0	62.9	

TABLE 4-43

RHODE ISLAND 1968-69

State Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
School Operation Fund	3,947,342				32,092,742	36,040,084
School Housing Aid Program Fund					4,100,000	4,100,000
Program for Disadvantaged Child.			2,000,000			2,000,000
Program for Handicapped Children			1,000,000			1,000,000
Total State Funds	3,947,342		3,000,000		36,192,742	43,140,084
Percent Each Level	9.2	0.0	6.9	0.0	83.9	
Local Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Required Minimum Effort					61,616,712	61,616,712
Additional Local Funds	21,208,788					21,208,788
Total Local Funds	21,208,788				61,616,712	82,825,500
Percent Each Level	25.6	0.0	0.0	0.0	74.4	
TOTAL STATE & LOCAL FUNDS	25,156,130		3,000,000		97,809,454	125,965,584
PERCENT EACH LEVEL	20.0	0.0	2.4	0.0	77.6	

TABLE 4-44

SOUTH CAROLINA 1968-69

State Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Teacher's Salary Fund			111,895,368			111,895,368
Transportation Fund			10,564,935			10,564,935
Maintenance and Operation Fund		6,587,870				6,587,870
Supervision & Overhead Fund		4,937,003				4,937,003
Construction & Equipment of Average Vocational Schools			1,207,124			1,207,124
Vocational Educational Fund			5,262,424			5,262,424
Average Trade Schools			824,827			824,827
State Public Schools Building Fund		16,386,700				16,386,700
Teacher's Salary Fund (non-teachers)			4,753,893			4,753,893
County School Administration Fund		280,968				280,968
School Lunch Fund		173,468				173,468
School Lunch Supervision Fund		197,248				197,248
Attendance Supervisor's Fund		197,248				197,248
Adult Education Act			1,607,577			1,607,577
Audio Visual Aids Library Fund			200,000			200,000
Driver Education Fund			304,512			304,512
Mentally & Physically Handicapped Children Fund			35,000			35,000
Special Classes for Emotionally Disturbed Fund			10,000			10,000
Free Textbooks Fund			3,500,000			3,500,000
Total State Funds		28,760,505	140,165,660			168,926,165
Percent Each Level	0.0	17.0	83.0	0.0	0.0	
Local Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Required Minimum Effort						
Additional Local Funds	72,761,693					72,761,693
Total Local Funds	72,761,693					72,761,693
Percent Each Level	100.0	0.0	0.0	0.0	0.0	
TOTAL STATE & LOCAL FUNDS	72,761,693	28,760,505	140,165,660			241,687,858
PERCENT EACH LEVEL	30.1	11.9	58.0	0.0	0.0	

TABLE 4-45

SOUTH DAKOTA 1968-69

State Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
State Foundation Program of Financial Support to School Districts			3,955,077		5,180,923	9,136,000
Permanent School Fund		2,081,304				2,081,304
Exceptional Children's Fund			514,000			514,000
School Land Tax Base Depletion Fund	258,810					258,810
Public Shooting Areas Fund	65,000					65,000
Total State Fund	323,810	2,081,304	4,469,077		5,180,923	12,055,114
Percent Each Level	2.7	17.2	37.1	0.0	43.0	
Local Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Required Minimum Effort					19,875,000	19,875,000
Additional Local Funds	57,603,674					57,603,674
Total Local Funds	57,603,674				19,875,000	77,478,674
Percent Each Level	74.3	0.0	0.0	0.0	25.7	
TOTAL STATE & LOCAL FUNDS	57,927,484	2,081,304	4,469,077		25,055,923	89,533,788
PERCENT EACH LEVEL	64.7	2.3	5.0	0.0	28.0	

TABLE 4-46

TENNESSEE 1968-69

State Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Annual School Program Fund			162,815,681		12,447,319	175,263,000
Capital Outlay Fund	1,053,457			9,328,543		10,382,000
State Textbook Fund			3,913,000			3,913,000
Vocational Education Fund			5,886,000			5,886,000
Excess Costs for Special Education			1,193,000			1,193,000
Sick Leave for Teachers Fund		659,000				659,000
Total State Funds	1,053,457	659,000	173,807,681	9,328,543	12,447,319	197,296,000
Percent Each Level	0.5	0.3	88.2	4.7	6.3	
Local Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Required Minimum Effort					17,418,279	17,418,279
Additional Local Funds	164,581,721					164,581,721
Total Local Funds	164,581,721				17,418,279	182,000,000
Percent Each Level	90.4	0.0	0.0	0.0	9.6	
TOTAL STATE & LOCAL FUNDS	165,635,178	659,000	173,807,681	9,328,543	29,865,598	379,296,000
PERCENT EACH LEVEL	47.3	0.2	45.8	2.4	7.9	

TABLE 4-47

TEXAS 1968-69

State Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Foundation Program Fund					365,528,000	365,528,000
Available School Fund		260,158,000				260,158,000
State Textbook Fund			17,418,000			17,418,000
Total State Funds		260,158,000	17,418,000		365,528,000	643,104,000
Percent Each Level	0.0	40.5	2.7	0.0	56.8	
Local Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Required Minimum Effort					142,571,464	142,571,464
Additional Local Funds	474,197,167					474,197,167
Total Local Funds	474,197,167				142,571,464	616,768,631
Percent Each Level	76.9	0.0	0.0	0.0	23.1	
TOTAL STATE & LOCAL FUNDS	474,197,167	260,158,000	17,418,000		508,099,464	1,259,872,631
PERCENT EACH LEVEL	37.6	20.7	1.4	0.0	40.3	

TABLE 4-48

UTAH 1968-69

State Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Uniform School Fund			5,597,628		73,073,094	78,670,722
Bond Unit Aid				1,710,000		1,710,000
Alternate Building Aid				1,235,000		1,235,000
School Lunch Fund		1,661,409				1,661,409
Continuing School Building Aid Fund				1,088,000		1,088,000
Driver Education Fund			580,754			580,754
Vocational Education Fund			238,000			238,000
Total State Funds		1,661,409	6,416,382	4,033,000	73,073,094	85,183,885
Percent Each Level	0.0	2.0	7.5	4.7	85.8	
Local Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Required Minimum Effort					45,386,344	45,386,344
Additional Local Funds	22,556,009					22,556,009
Total Local Funds	22,556,009				45,386,344	67,942,353
Percent Each Level	33.2	0.0	0.0	0.0	66.8	
TOTAL STATE & LOCAL FUNDS	22,556,009	1,661,409	6,416,382	4,033,000	118,459,438	153,126,238
PERCENT EACH LEVEL	14.7	1.1	4.2	2.6	77.4	

TABLE 4-49

VERMONT 1968-69

State Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
School Aid Fund	501,913			24,126,798		24,628,711
School Building Construction Fund		4,648,259				4,648,259
Special Education for Handicapped Children			1,876,041			1,876,041
Vocational Education Fund			500,715			500,715
Driver Education and Training Fund			485,075			485,075
Total State Funds	501,913	4,648,259	2,861,831	24,126,798		32,138,801
Percent Each Level	1.6	14.4	8.9	75.1	0.0	
Local Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Required Minimum Effort				38,251,435		38,251,435
Additional Local Funds	13,996,315					13,996,315
Total Local Funds	13,996,315			38,251,435		52,247,750
Percent Each Level	26.8	0.0	0.0	73.2	0.0	
TOTAL STATE & LOCAL FUNDS	14,498,228	4,648,259	2,861,831	62,378,233		84,386,551
PERCENT EACH LEVEL	17.2	5.5	3.4	73.9	0.0	

TABLE 4-50

VIRGINIA 1968-69

State Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Basic State School Fund	579,895	85,568,418		101,134,802		187,283,115
State Sales Tax Fund		61,480,000				61,480,000
Vocational Education Fund			8,924,270			8,924,270
Pupil Transportation Fund		5,248,281	3,498,854			8,747,135
Special Education Fund			5,862,000			5,862,000
Textbook Fund			2,208,000			2,208,000
Guidance Counselor's Fund		2,012,000				2,012,000
Local Supervision Fund		1,479,360				1,479,360
Driver Education Fund			934,000			934,000
Teacher's Sick Leave Fund		1,008,715				1,008,715
Twelve Month Principal's Fund		916,560				916,560
In-service Training Fund		800,000				800,000
Summer School Fund		1,710,475				1,710,475
Public School's Library Fund			1,142,990			1,142,990
Educational Television Fund	1,000,000					1,000,000
Superintendent's Fund	455,810					455,810
Contingency Fund			150,000			150,000
Pilot Study Fund	75,000					75,000
Adult Education Fund			120,000			120,000
Total State Funds	1,654,895	160,679,619	22,690,114	101,284,802		286,309,430
Percent Each Level	0.6	56.1	7.9	35.4	0.0	
Local Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Required Minimum Effort				146,247,822		146,247,822
Additional Local Funds	140,437,475					140,437,475
Total Local Funds	140,437,475			146,247,822		286,685,297
Percent Each Level	49.0	0.0	0.0	51.0	0.0	
TOTAL STATE & LOCAL FUNDS	142,092,370	160,679,619	22,690,114	247,532,624		572,994,727
PERCENT EACH LEVEL	24.8	28.0	4.0	43.2	0.0	

TABLE 4-51

WASHINGTON 1968-69

State Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
General Fund—Basic Support			129,236,145		119,324,855	248,561,000
School Building Construction Fund					13,000,000	13,000,000
Transportation Reimbursement			18,698,949			18,698,949
Fund for Education of Handicapped Children			14,899,000			14,899,000
Vocational-Technical Schools Fund			3,932,000			3,932,000
State Institutions Fund			2,569,000			2,569,000
Adult Education Fund			532,000			532,000
Driver Training Fund			2,475,000			2,475,000
Public Utility District Excise Tax	249,000				1,411,000	1,660,000
State Forest Fund	69,900				396,100	466,000
State Two-Mill Property Tax	26,157,000					26,157,000
Total State Funds	26,475,900		172,342,094		134,131,955	332,949,949
Percent Each Level	7.9	0.0	51.8	0.0	40.3	
Local Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Required Minimum Effort					82,813,730	82,813,730
Additional Local Funds	70,991,308					70,991,308
Total Local Funds	70,991,308				82,813,730	153,805,038
Percent Each Level	46.2	0.0	0.0	0.0	53.8	
TOTAL STATE & LOCAL FUNDS	97,467,208		172,342,094		216,945,685	486,754,987
PERCENT EACH LEVEL	20.0	0.0	35.4	0.0	44.6	

TABLE 4-52

WEST VIRGINIA 1968-69

State Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Public School Support Program—Foundation Program Portion	1,378,742		19,363,919		31,904,603	52,647,264
Public School Support Program—Supplemental Instruction Support		46,444,544				46,444,544
Public School Support Program—Supporting Services Portion		5,081,390	5,081,390			10,162,780
Comprehensive Educational Program Fund			1,000,000			1,000,000
Vocational Educational Fund			1,461,250			1,461,250
Exceptional Children Fund			569,000			569,000
School Lunch Fund		400,000				400,000
Increased Enrollment Fund			350,000			350,000
Free Textbook Fund			300,000			300,000
County Superintendent's Salary Fund		61,000				61,000
Orphanage Aid Fund			25,000			25,000
Safety Educational Fund			135,000			135,000
Total State Funds	1,378,742	51,986,934	28,285,559		31,904,603	113,555,838
Percent Each Level	1.2	45.8	24.9	0.0	28.1	
Local Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Required Minimum Effort					32,196,646	32,196,646
Additional Local Funds	43,294,657					43,294,657
Total Local Funds	43,294,657				32,196,646	75,491,303
Percent Each Level	57.4	0.0	0.0	0.0	42.6	
TOTAL STATE & LOCAL FUNDS	44,673,399	51,986,934	28,285,559		64,101,249	189,047,141
PERCENT EACH LEVEL	23.6	27.5	15.0	0.0	33.9	

TABLE 4-53

WISCONSIN 1968-69

State Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Elementary and High School Aid Appropriation—Equalization Portion				130,306,264		130,306,264
Elementary and High School Aid Appropriation—Flat Grant Portion	6,525,436					6,525,436
Transportation Fund			12,730,400			12,730,400
Education of Handicapped Children Fund			9,584,500			9,584,500
Vocational & Adult Education Fund			6,858,000			6,858,000
Tuition Fund			1,751,700			1,751,700
Driver Education Fund			1,270,000			1,270,000
Common School Fund		950,000				950,000
Total State Funds	6,525,436	950,000	32,194,600	130,306,264		169,976,300
Percent Each Level	3.8	0.6	18.9	76.7	0.0	
Local Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Required Minimum Effort				389,279,231		389,279,231
Additional Local Funds	128,414,750					128,414,750
Total Local Funds	128,414,750			389,279,231		517,693,981
Percent Each Level	24.8	0.0	0.0	75.2	0.0	
TOTAL STATE & LOCAL FUNDS	134,940,186	950,000	32,194,600	519,585,495		687,670,281
PERCENT EACH LEVEL	19.6	0.1	4.7	75.6	0.0	

TABLE 4-54

WYOMING 1968-69

State Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
School Foundation Program Fund			4,748,872		11,742,094	16,490,966
Common School Land Income Fund					4,705,859	4,705,859
Total State Funds			4,748,872		16,447,953	21,196,825
Percent Each Level	0.0	0.0	22.4	0.0	77.6	
Local Funds	*Level 0*	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Total*
Required Minimum Effort					23,415,520	23,415,520
Additional Local Funds	13,068,930					13,068,930
Total Local Funds	13,068,930				23,415,520	36,484,450
Percent Each Level	35.8	0.0	0.0	0.0	64.2	
TOTAL STATE & LOCAL FUNDS	13,068,930		4,748,872		39,863,473	57,681,275
PERCENT EACH LEVEL	22.7	0.0	8.2	0.0	69.1	

vide more or less financial equalization. Although this study was specifically designed and accomplished for the National Educational Finance Project, hopefully, it will provide those legislators and educators concerned with financial equalization of educational opportunity a solid foundation on which to improve their state school support programs.

One of the most important conclusions that can be derived from the analysis of the financial sources available for education presented in this chapter, is that the extent to which financial resources for education are equalized does not depend as much on the type of plan used as on the content of the plan and the extent to which it is financed. For example:

1. If the variable unit cost type of flat grant is used to provide 100% of the financing in the state including federal funds, the variable flat grant plan becomes the Hawaii plan which theoretically provides complete equalization of financial resources.
2. If any one of the three equalization plans absorbs all of the local taxing leeway, and educational need is measured on a variable unit cost basis, then all of the equalization plans become equivalent to the Hawaii plan of complete state support because local funds are in effect converted into state funds.
3. Therefore, it is evident that if any formula plan of state support approaches complete state support, then all plans are equally efficient in equalizing the financial resources available for education.

However, if a state finances its schools from a combination of state and local funds, it will achieve greater financial equalization from a *given amount of state revenue* if it utilizes the equalization plan of state financing and maximizes the required local effort of school districts which is included as a part of the total program equalized.

FOOTNOTES

1. Paul R. Mort and Walter C. Reusser, *Public School Finance, Its Background, Structure, and Operation.* New York: McGraw-Hill Book Company, 1941.

2. V. W. Doherty, "Principle of Equalization." *American School Board Journal.* 143:20-1, September, 1961.

3. R. L. Johns and Edgar L. Morphet, *Financing the Public Schools.* New Jersey: Prentice-Hall, Inc., 1960.

4. There are certain exceptions. Hawaii utilizes a complete state support program of public education. Several other states have predomi-

nantly state supported systems. (See North Carolina and Delaware for example.)

5. See for example: (1) Harrison, Forrest W. and Eugene P. McLoone, *Profiles in School Support.* Washington, D. C., U. S. Department of Health, Education and Welfare, 1965. (2) Missouri State Board of Education, *Planning and Financing Education for the Future.* A report for the Missouri Governor's Conference on Education, 1968. (3) Munse, Albert R., *State Programs for Public School Support.* United States Department of Health, Education and Welfare. Washington, D. C.: United States Government Printing Office, 1965.

6. R. G. Salmon, *"The Financial Equalization of Public School Support Programs in Nine Selected States."* Unpublished dissertation, University of Florida, 1969.

7. For further explanation of the matching grants, see: R. L. Johns, "The Economics and Financing of Education," Chapter 4, *Emerging Designs for Education*: Edited by, Edgar L. Morphet and David L. Jesser: Denver, Colorado, 1316 Lincoln, Designing of Education for the Future, 1968; p. 223.

8. The term "required local share" is primarily used by persons working with foundation programs and does not specifically apply to percentage equalizing programs in which there is no required local share, *per se.* However, for the purposes of this study the calculated local contribution of percentage equalizing programs and the required local share of foundation programs will be considered synonomous.

9. It is possible for a state utilizing a flat grant school support program, which would be classified in Level 1 or 2, to achieve a high degree of financial equalization by minimizing the local district's contribution and maximizing the states' contribution.

10. The United States was divided into the identical geographical regions as those utilized by the NEA Research Division. For example, see: NEA, *Estimates of School Statistics*, 1969-70. National Educational Association; 1201 Sixteenth Street, N. W.; Washington, D. C., 1970.

CHAPTER 5

Comparison of Revenues for Different Population Classifications of School Districts

ROE L. JOHNS
AND
JAMES A. BURNS

The charge has frequently been made by some in recent years that our state legislatures are rural in their orientation, and that they have systematically penalized central cities in the distribution of state school funds. Others have insisted that this claim is a myth, that the central cities are wealthy and receive their fair share of school revenue and that if educational opportunities are truly equalized, other population classifications are in equal or even greater need of increased school revenue than the central cities.

A variety of factors have focused increased attention on the distribution of educational revenue to different classes of school districts usually identified by population classifications. Most attention in recent years has been given to the plight of the great metropolitan centers in the United States. It is clear that the United States is becoming more and more an urban country. Urban areas have continued to increase in population resulting in social, economic, and political conflicts created by new demands of varying groups with disparate needs. These conflicts, together with new political power and interests of various urban groups, have created new demands that educational financing programs recognize the unique problems of the city.

Many factors have contributed to the educational problems of the large urban centers in the United States. The flight of the middle class to suburbia, the relative erosion of the central city tax base, the increase in general governmental costs (usually called the municipal overburden), and the growing concentration of low socio-economic groups in the central city are all factors which can be cited as intensifying the problems of financing urban education. Sacks[1] has documented the relative decline in fiscal preeminence of the central city.

There is much historical evidence that indicates that the present plight of the central cities was created in considerable part by the failure of the states and the federal government to equalize educational opportunity among and within the states. Historically, the southern states, primarily because of poverty relative to the rest of the nation, have had far more limited educational opportunities than other regions of the nation. This has been particularly true in the rural districts. There have been major improvements in educational programs in the southern states in recent years, but the disadvantaged migrants from the southern states who are creating many of the problems of the core cities of the north were produced, and are still being produced, in rural areas with inadequate educational programs. Sound public policy surely indicates that adequate educational opportunities be made available in school districts of all population classifications, in all regions of the nation. Therefore, this study[2] was designed to examine the degree of fiscal equalization of educational opportunity achieved in the following population classifications of school districts: (1) central or core city districts, (2) suburban school districts, (3) independent city school districts and (4) rural school districts. In order to analyze the effect of different sources of school revenue on financial equalization of educational opportunity, school revenues were classified as follows: (1) foundation program or basic state aid (excluding special aids), (2) all state aid plus all local school revenue, (3) total state, local and federal revenue. Revenues were classified cumulatively in this manner in order to ascertain (1) the extent to which foundation program or basic state aid equalized educational opportunity, (2) the extent to which all state aid, including foundation program or basic aid and special aids, plus local school revenue equalized educational opportunity and (3) the extent to which educational opportunities are equalized by total state, local and federal revenues.

DESIGN OF STUDY

This investigation was designed to determine the extent of equalization from federal, state, and local support programs when local school districts were classified as central city, non-central city or suburban, independent city, and rural. Ten states were selected according to the following criteria:

1. The state must have had a metropolitan central city with a corresponding school district with 50,000 average daily attendance or more.
2. School districts of the state must have been organized so that they could be classified according to the following typology: central city, outside central city or suburban, independent city, and rural.
3. The states selected should, as far as possible, be geographically distributed and have a range in taxpaying ability representative of that of the United States.

Districts composed of the following elements were included from each of the states meeting the above criteria:

1. The school district corresponding to the central city of the largest city of each state.
2. Those non-central city or suburban school districts (at least 1,500 ADA) connected to the largest city's school district (in the same Standard Metropolitan Statistical Area).
3. Those school districts which represented independent cities and which had an average daily attendance of 6,000—12,000.
4. Those school districts which had an average daily attendance of between 1,500—5,000 and which did not have a town of over 10,000 population within the school district.

For each state, random samples of suburban, independent city, and rural districts meeting the above criteria 2, 3 and 4 were selected. The samples consisted of at least ten districts, or 15 percent of the total number of districts, or the total number of districts in the population classification. Total districts were used when the number of districts did not exceed twenty in a population classification. Fifteen percent of the total districts was used when the number of districts exceeded twenty. If 15 percent of the districts was less than ten, ten districts were selected for the study.

Thus, the districts selected from each of the ten selected states included districts representing the largest central city in the state, a sample of non-central city or suburban areas contiguous to the largest city in the state, a sample of independent cities within the criteria limits, and a sample of rural areas that met the criteria. This selection of districts provided a sufficient sample to compare the large central city district with its suburban districts, with smaller city districts in the state, and with rural districts in the state.

This method of sampling resulted in the selection of 445 districts from ten states, distributed as follows: Alabama 22, Colorado 37, Georgia 24, Michigan 54, Missouri 42, New York 65, Ohio 88, Oregon 22, Texas 52, and Wisconsin 39. The sampling method resulted in the selection of a greater number of districts from the states which had a greater number of districts. For example, Alabama had 118 school districts in 1968-69 and Ohio, 648. It is noted in Chapter 3 that there are only approximately 4,800 districts in the United States which have an average daily attendance of 1,500 or more. Therefore, the sample in this study contains approximately 10 percent of all districts in the United States with an attendance of 1,500 or more.

Treatment of Data

The three categories of revenue gathered from each state for each sample district were as follows: minimum foundation program revenue or basic state aid; total local and total state revenue including foundation program or basic aid and also special aids; and total local, state, and federal revenue.

Each category of revenue and the valuation of property was divided by the district's average daily attendance. These categories were compared by classifying the sample districts into one of the four population classifications (central city, suburban, independent city, and rural) and comparing the three revenue categories and the category of wealth both within and between population classifications.

Three correlations were computed for each state to determine the degree of equalization provided by the three categories of revenue. Each of the three revenue categories was correlated with wealth as measured by equalized assessed valuation or assessed valuation. The measure of wealth used was dependent upon the measure made available by the state to the researcher.

Perhaps the greatest concern of educational finance experts is the extent to which educational financing programs equalize educational opportunity through the equalization of educational resources. Equalization of educational resources is considered in this chapter as to the extent to which financial resources per pupil in ADA are distributed in inverse proportion to wealth. It would, of course, have been preferable to use some type of weighted pupil measure which reflected cost differentials for different types of pupil populations and different types of districts but this information was not available. However, it is not believed that the use of average daily attendance, rather than weighted, has seriously affected the conclusion of this study.

SUMMARY OF FINDINGS.

A brief summary of the findings from this study is presented in this section of the chapter.

Variations in Wealth Among Classes of Districts in Ten States

Table 5-1 shows the average equalized valuation or assessed valuation per pupil by four population classifications of school districts in ten states. The valuation per pupil is not comparable from state to state because the equalized valuation or assessed

TABLE 5-1
EQUALIZED ASSESSED VALUATION OR ASSESSED VALUATION
PER PUPIL IN ADA FOR SELECTED POPULATION CLASSIFICATIONS
OF EACH STATE 1968-1969

	Central City		*Suburbs*		*Independent City*		*Rural*	
State	*Amount*	*Rank Within State*	*Amount*	*Rank Within State*	*Amount*	*Rank Within State*	*Amount*	*Rank Within State*
Alabama	$ 8,711	2	$ 8,725	1	$ 4,711	3	$ 4,172	4
Colorado	14,640	1	7,172	4	7,338	3	7,983	2
Georgia*	45,199	1	29,508	2	27,508	3	25,157	4
Michigan*	18,205	3	20,980	1	19,073	2	13,670	4
Missouri	12,044	1	11,673	2	9,890	3	6,395	4
New York*	45,513	1	33,031	2	27,801	3	21,943	4
Ohio	20,219	1	18,248	2	14,083	4	[illegible]88	3
Oregon*	47,604	1	31,827	4	41,970	3	[illegible]89	2
Texas	23,244	1	17,200	2	15,983	3	[illegible]56	4
Wisconsin	38,278	1	29,128	3	35,162	2	[illegible]08	4
Average Rank Within State		1.2		2.3		2.9		3.5

*Equalized Assessed Valuation.

valuation varies in percent of true valuation from state to state. However, within a given state, the average valuation per pupil should be fairly comparable among different classes of districts. The average valuation per pupil for each population classification of districts is more accurate in states where equalized valuation data are available. However, the average assessed valuation per pupil for a class of districts is fairly comparable with the average valuation of other classes of districts unless there is a systematic difference within a state in the percent of true value at which property is assessed in central city, suburban, independent city and rural districts.

Table 5-1 shows that in the ten states studied, the central city or core city district had the highest average rank in valuation per pupil followed in order by suburbs, independent city and rural districts. In eight of the ten states, the central city district ranked highest in valuation per pupil and in only two of the ten states did the suburban districts rank highest in valuation per pupil. Therefore, the evidence collected in this study does not support the popular myth that the suburban districts have a higher valuation per pupil than the central city district. It will also be observed that in seven of the ten states the rural districts ranked lowest in valuation per pupil.

Districts within each population class of school districts vary widely in valuation per pupil in most states. Table 5-2 shows that in five of the ten states studied the suburban district with the highest per pupil valuation had more than three times the valuation per pupil of the suburban district with the lowest valuation. This evidence explodes another myth that all suburban districts are wealthy. In only two of the ten states does the independent city district with the highest valuation have three times or more of the valuation per pupil of the district with the lowest valuation. However, in seven of the ten states, the rural district with the highest valuation has three or more times the valuation per pupil of the district with the lowest valuation. These variations are not due to very small numbers of pupils in a district because all districts with an average daily attendance of less than 1,500 were excluded from the sample. Therefore, the wide variations in valuation per pupil among districts in each population class are quite significant. The central city district was excluded from Table 5-2 because only the largest central city in each state was included in the sample.

TABLE 5-2
RATIO OF VALUATION PER PUPIL OF DISTRICT WITH LOWEST VALUATION TO DISTRICT WITH HIGHEST VALUATION 1968-69

State	*Suburb*	*Independent City*	*Rural*
Alabama	1 — 1.0	1 — 2.1	1 — 3.2
Colorado	1 — 2.4	1 — 3.0	1 — 11.4
Georgia	1 — 1.8	1 — 1.2	1 — 2.5
Michigan	1 — 4.8	1 — 1.9	1 — 12.3
Missouri	1 — 12.7	1 — 1.2	1 — 2.1
New York	1 — 5.4	1 — 2.6	1 — 5.5
Ohio	1 — 3.7	1 — 2.2	1 — 16.8
Oregon	1 — 2.0	1 — 3.3	1 — 4.7
Texas	1 — 4.6	1 — 2.6	1 — 11.5
Wisconsin	1 — 2.1	1 — 2.9	1 — 2.4

State Foundation or Basic State Aid Only by Class of District

Table 5-3 shows the foundation program or basic state aid per pupil by class of district. Each of the ten states has a foundation program or basic state aid distribution which has as one of its principal purposes the equalization of educational opportunity in that state. Do these basic state appropriations tend to equalize educational opportunity? Table 5-3 shows the amount of these appropriations per pupil in each state and also the rank within each state by class of district of the amount per pupil received. This table shows that among these ten states the average

TABLE 5-3
STATE FOUNDATION PROGRAM OR BASIC STATE AID ONLY PER PUPIL IN AVERAGE DAILY ATTENDANCE 1968-69*

	Central City		*Suburbs*		*Independent City*		*Rural*	
State	*Amount*	*Rank Within State*	*Amount*	*Rank Within State*	*Amount*	*Rank Within State*	*Amount*	*Rank Within State*
Alabama	$227	3	$234	2	$236	1	$222	4
Colorado	108	4	170	3	171	2	184	1
Georgia	218	4	261	2.5	261	2.5	314	1
Michigan	248	3	266	2	242	4	299	1
Missouri	169	4	175	3	200	2	216	1
New York	530	1	438	4	459	3	528	2
Ohio	129	4	151	3	176	2	228	1
Oregon	130	4	176	1	139	3	159	2
Texas	157	4	195	3	206	2	215	1
Wisconsin	22	4	218	1	106	3	207	2
Average Rank Within State		3.5		2.5		2.5		1.6

*Excludes special state appropriations.

rural district received the greatest amount of basic or foundation program state aid per pupil, the central districts the least, and the suburbs and independent cities ranked the same. Reference to Table 5-1 will show this order in almost the reverse of the order of valuation per pupil. Maximum financial equalization of educational opportunity from a combination of state and local funds requires that the state funds allocated per pupil to the districts shall be in inverse relationship to the wealth per pupil of the districts. In other words the less wealthy districts would have to receive more funds per pupil from the state than the more wealthy districts (other things being equal) in order to maximize the equalization of financial resources among the districts. Table 5-3 shows that in most states the basic state or foundation program appropriation does have an equalizing effect.

The effect of the foundation program or basic state aid on equalization of financial resources is further analyzed in Table 5-4. This table shows that in eight of the ten states studied that the basic or foundation program state appropriation had a significant influence on financial equalization. The equalization effect was not significant in Alabama and Texas. A perfect correlation is either 1.0 or −1.0. That is, the correlation may range between a perfect positive correlation of 1.0 and a perfect negative correlation of −1.0. A negative correlation means that if one measure increases, the measure with which it is being compared decreases. The negative correlations in Table 5-4 mean

TABLE 5-4
CORRELATION BETWEEN BASIC STATE AID OR FOUNDATION PROGRAM AID PER PUPIL AND VALUATION OF PROPERTY PER PUPIL OF SCHOOL DISTRICTS 1968-69

State	*Coefficient of Correlation*
Alabama	.3710
Colorado	−.4812*
Georgia	−.6721*
Michigan	−.9999*
Missouri	−.7222*
New York	−.8373*
Ohio	−.9114*
Oregon	−.5482*
Texas	−.0896
Wisconsin	−.8291*

*Correlation significant at the one percent level.

that the greater the wealth per pupil of a district, the less the amount of state aid per pupil it receives. If the state aid per pupil received by districts in a state is negatively correlated with valuation per pupil, the state aid has an equalizing effect.

Total State Aid Plus Total Local School Revenue Per Pupil by Classes of Districts

Table 5-5 shows that when total state funds are added to local funds the state foundation program or basic state aid appropriations are not sufficient to equalize educational opportunity. Total state funds include the basic or foundation program appropriation and also special state aids. The two wealthiest classes of districts, the central city and the suburbs, have the highest amounts of revenue available per student; and the two classes of districts with the lowest valuation per pupil have the lowest amount of revenue available per pupil. Part of these differences could possibly be due to variations in local tax effort to support schools among classes of districts. However, most of the differences in revenue available per pupil are no doubt due to differences in valuation per pupil.

Table 5-6 shows that state funds were not sufficient or were not apportioned in such a manner as to equalize the differences

TABLE 5-5
TOTAL LOCAL AND STATE REVENUE PER PUPIL IN ADA FOR SELECTED POPULATION CLASSIFICATIONS OF EACH STATE 1968-1969

	Central City		*Suburbs*		*Independent City*		*Rural*	
State	*Amount*	*Rank Within State*	*Amount*	*Rank Within State*	*Amount*	*Rank Within State*	*Amount*	*Rank Within State*
Alabama	$ 349	2	$ 355	1	$ 342	3	$ 324	4
Colorado	775	1	577	3	601	2	551	4
Georgia	684	1	516	2	425	4	463	3
Michigan	734	3	860	1	786	2	655	4
Missouri	761	2	847	1	728	3	690	4
New York	1,185	2	1,367	1	1,135	3	1,112	4
Ohio	665	2	743	1	557	3	510	4
Oregon	766	4	823	2	768	3	841	1
Texas	619	1	526	3	554	2	511	4
Wisconsin	762	3	875	1	750	4	776	2
Average Rank Within State		2.1		1.6		2.9		3.4

TABLE 5-6
CORRELATION BETWEEN TOTAL STATE AND LOCAL REVENUE AVAILABLE PER PUPIL AND VALUATION OF PROPERTY PER PUPIL 1968-69

State	*Coefficient of Correlation*
Alabama	.6466*
Colorado	.7755*
Georgia	.7392*
Michigan	.6498*
Missouri	.8995*
New York	.7377*
Ohio	.7146*
Oregon	.2931
Texas	.8981*
Wisconsin	.1990*

*Significant at the one percent level

in revenue associated with differences in property valuation per pupil among the districts in eight of the ten states. All of the correlations were significantly positive except in the states of Oregon and Wisconsin. A significant positive correlation between total state and local revenue per pupil and property valuation per pupil means that the greater the property valuation per pupil in a district, usually the greater the amount of state and local revenue available per pupil.

Total State, Local and Federal Revenue Available Per Pupil by Classes of Districts

Table 5-7 presents total state, local and federal revenue per pupil by four classes of school districts. It is interesting to compare this table with Table 5-5 which presents total state and local revenue per pupil for these same four classes of districts. Table 5-7 shows that the average rank within the state of central city districts in ten states in total local, state and federal revenue per pupil was 1.5, suburban districts 2.3, independent city districts 2.9 and rural districts 3.0. This is the same order of ranking of these districts in property ranking per pupil although the absolute averages vary somewhat. This means that the total revenue per pupil from all sources, local, state and federal, tends to be greatest in the districts with the highest property valuation per pupil.

It is also noted from Table 5-7 that when federal revenue is

TABLE 5-7
TOTAL LOCAL, STATE, AND FEDERAL REVENUE PER PUPIL IN ADA FOR SELECTED POPULATION CLASSIFICATIONS OF EACH STATE 1968-1969

	Central City		*Suburbs*		*Independent City*		*Rural*	
State	*Amount*	*Rank Within State*	*Amount*	*Rank Within State*	*Amount*	*Rank Within State*	*Amount*	*Rank Within State*
Alabama	$ 405	3	$ 391	4	$ 421	1	$ 417	2
Colorado	836	1	619	4	665	2	627	3
Georgia	757	1	551	2	496	4	505	3
Michigan	833	2	875	1	824	3	680	4
Missouri	851	2	875	1	746	4	752	3
New York	1,297	2	1,370	1	1,175	3	1,131	4
Ohio	734	1	546	3	588	2	529	4
Oregon	812	3	837	2	797	4	865	1
Texas	647	1	546	4	595	2	586	3
Wisconsin	816	2	897	1	769	4	805	3
Average Rank Within State		1.5		2.3		2.9		3.0

included that the ranking of both the central city districts and the rural districts is raised. This would indicate that the central cities and the rural districts are receiving proportionately more federal funds (probably Title I funds from the Elementary and Secondary Education Act) than the suburban and independent city districts.

Table 5-8 shows the correlation between total local, state and federal revenue per pupil and valuation of property per pupil. In

TABLE 5-8
CORRELATION BETWEEN TOTAL LOCAL, STATE AND FEDERAL REVENUE AVAILABLE PER PUPIL AND VALUATION OF PROPERTY PER PUPIL 1968-69

State	*Coefficient of Correlation*
Alabama	−.0378
Colorado	.6691*
Georgia	.7600*
Michigan	.5801*
Missouri	.7594*
New York	.7295*
Ohio	.6975*
Oregon	.3620
Texas	.7266*
Wisconsin	.2181

*Significant at the one percent level.

seven of the ten states the correlation is significantly positive indicating that total local, state and federal revenue per pupil is significantly correlated positively with property valuation per pupil. Attention is directed to the fact that the higher the positive correlation, the greater the association of total revenue with property valuation. The correlations presented in Table 5-8 for seven of the ten states are slightly less than the correlations shown in Table 5-6 for these same states. This indicates that federal funds had a slight equalizing effect in seven of the ten states studied.

Variation Among Districts in Total Revenue Per Pupil

Table 5-9 shows the variation among districts in a state in total local, state and federal revenue per pupil. These variations are quite significant because the sample of districts from each state includes only districts that have an average daily attendance in excess of 1,500. The ratios of the lowest district to the highest district for each population classification of school districts and for the state as a whole are shown in Table 5-9. No ratio is shown for the central city district because only one central city district is included for each state. The variations in total revenue per pupil are significant for all classes of districts, but the variations are greater in the suburban and rural districts than among the independent city districts. Among the suburban districts in these ten states, the lowest variation is in Alabama

TABLE 5-9
RATIO OF DISTRICT WITH THE LOWEST TOTAL AMOUNT OF LOCAL, STATE AND FEDERAL REVENUE PER PUPIL TO DISTRICT WITH HIGHEST AMOUNT 1968-69

State	*Suburb*	*Independent City*	*Rural*	*Total Districts in Sample*
Alabama	1 — 1.2	1 — 1.3	1 — 1.5	1 — 1.7
Colorado	1 — 1.5	1 — 1.4	1 — 1.8	1 — 1.8
Georgia	1 — 1.5	1 — 1.2	1 — 1.5	1 — 1.8
Michigan	1 — 1.9	1 — 1.3	1 — 1.6	1 — 2.2
Missouri	1 — 3.4	1 — 1.3	1 — 1.4	1 — 3.4
New York	1 — 2.0	1 — 1.5	1 — 2.0	1 — 2.8
Ohio	1 — 1.8	1 — 1.5	1 — 1.5	1 — 2.6
Oregon	1 — 1.4	1 — 1.2	1 — 1.3	1 — 1.5
Texas	1 — 1.5	1 — 1.4	1 — 2.2	1 — 2.3
Wisconsin	1 — 1.6	1 — 1.8	1 — 1.4	1 — 2.1

where the suburban district with the greatest amount of total revenue per pupil had 1.2 times as much revenue as the suburban district with the lowest total per pupil revenue. This means that the most favored suburban district had 20 percent more revenue available per pupil than the least favored suburban district. The greatest variation among suburban districts in per pupil revenue is found in Missouri where the most favored district had 3.4 times the revenue per pupil of the least favored district.

Among independent city districts the variation ranged from 1 to 1.2 in Oregon and Georgia to 1 to 1.8 in Wisconsin. The variation among rural districts ranged from 1 to 1.3 in Oregon to 1 to 2.2 in Texas.

When all the sample districts in each state are combined, the variations among the districts are significant in all states. The range is from 1.5 in Oregon to 3.4 in Missouri. This means that of the districts with an average daily attendance of 1,500 or more in Oregon the most favored district had 50 percent more total revenue available per pupil and in Missouri, the most favored district had 240 percent more total available per pupil in 1968-69 than the least favored district.

These data indicate the financial resources available per pupil were far from equalized in 1968-69 in the ten states in the sample but that some states had moved toward equalization of financial resources more than other states.

CONCLUSIONS

This study was based on a sample of 445 districts of 1,500 or more average daily attendance in ten selected states. The findings should be fairly representative of the nation. The districts of each state were grouped into the following four population classifications: central or core city, suburban, independent city and rural. The study was designed to determine how well the financial resources per pupil were equalized within and among these four types of districts and to determine whether there was any systematic discrimination against the central city districts or any other class of districts in the apportionment of state school funds. Following are the principal conclusions with respect to the ten states studied.

1. The central city or core city districts have a greater valuation of property per pupil than any other class of school districts.

The central city districts are followed in order of valuation of property per pupil by the suburban districts, the independent city districts and the rural districts.

2. Suburban districts within most of the states studied varied widely from each other in valuation of property per pupil. The same is true of independent city and rural districts.

3. There is no evidence that there is a systematic discrimination against central city districts or any other class of school districts in the distribution of state funds.

4. The basic state aid or foundation program state aid was apportioned by such methods as to significantly equalize the financial resources available per child in the school districts of eight of the ten states studied. The maximization of the equalization of the financial resources available per child from a combination of state and local funds is defined in the study reported in this chapter as the allocation of state funds per pupil inversely to the property valuation per pupil in the school districts. It is true, as is pointed out in Chapter 4, that some financial equalization results from the apportionment of state funds on the basis of a uniform amount per pupil without reference to local variations in property valuation per pupil. However, maximum equalization of financial resources from a given amount of state revenue in states which finance the basic state program from a combination of state and local revenue can be attained only by allocating state funds in inverse relationship to local taxpaying ability.

5. When all state aid (foundation program or basic state aid plus special aids) is added to total local school revenue, the revenue per pupil in average daily attendance was significantly positively correlated with the valuation of property per pupil in eight of the ten states studied. This means that state funds were insufficient in amount or were apportioned in such a manner as to fail to overcome the disequalizing effect of variations in amount of local revenue available per pupil.

6. When federal funds were added to state and local funds, it was found that the effect was slightly equalizing in seven of the ten states studied.

7. Significant variations among districts in the total amount of local, state and federal revenue available per pupil were found in all ten states. In six of the ten states studied, it was found

that the most favored district had over twice the total revenue available per pupil than the least favored district. Since all districts of less than 1,500 average daily attendance were excluded from the sample of districts studied, this finding is highly significant. If districts of less than 1,500 average daily attendance had been included the variations among districts would have been much greater.

8. Evidence presented in Volume 3 of the National Educational Finance Project entitled *Planning to Finance Education* shows that the costs for an equivalent educational opportunity are not the same for all types of pupils and that the percentage of high cost pupils such as the culturally disadvantaged, the handicapped and vocational students is not the same in all districts. The study reported in this chapter would have been improved if information concerning these pupils had been available for all of the districts included in the study. Unfortunately, this information was not available. However, it is not believed that the use of average daily attendance instead of weighted pupils reflecting cost differentials seriously affected the conclusions of this study except that the use of weighted pupils might have produced wider per pupil ranges than those reported.

9. Attention was directed in the first part of this chapter to the special problems (governmental overburden) of the core cities. The extra costs in these core cities for such services as public safety, sewage disposal, transportation and public welfare are well documented. Furthermore, the concentration of high cost culturally disadvantaged pupils in the public schools of the core cities is also well documented. The equalization of educational opportunity cannot be maximized unless the extra costs of these high cost pupils, not only in the core cities, but in other districts are provided for in state aid or federal distribution formulas. However, it is hardly possible to meet the extra financial needs of the core cities for such services as public safety, sewage disposal, transportation and public welfare by "trick" adjustments in state aid formulas. Such a policy would not meet the financial needs of these cities and it would interfere with a state's policy of equalizing educational opportunity. It would seem better policy for a state to recognize, in its formula for distributing state school funds, the extra costs of special types of education, not only in the core cities, but in all types of school districts and that it would assist the core cities in meeting

their "governmental overburden" by direct appropriations for that purpose.

FOOTNOTES

1. Seymour Sacks, "Current City Educational Systems: Economic and Fiscal Aspects of Their Current Dilemma," ***1968 State School Finance Laws Handbook,*** Evanston, Illinois: National School Boards Association, 1968, pp. 30-39.

2. For details of this study, see James Alan Burns, ***State Educational Revenue Support by Population Classification,*** unpublished doctoral dissertation. Gainesville, Florida, University of Florida, 1970. This study was sponsored by the National Educational Finance Project.

CHAPTER 6

Local Nonproperty Taxes for Schools

DUANE O. MOORE

Since World War II the growth in the number of local governmental units using local nonproperty taxes has been substantial. By 1958, two-thirds of the cities over 10,000 population levied one or more types of nonproperty taxes.[1]

Although the number of local governmental units using local nonproperty taxes is increasing, the percentage of local nonproperty tax revenue is still low. In 1942, all local governments, including school districts, obtained 7.6 percent of their local tax revenue from local nonproperty taxes. But despite the increase in the number of local governmental units using local nonproperty taxes, such taxes had increased to only 12.9 percent of local tax revenue in 1966.[2] The increase in the utilization of nonproperty tax sources in the United States has been caused by several factors. Some of these are the real or psychological burden of property taxes, possibility for higher yield, more direct relationship to "real" wealth, transfer of the tax burden to non-residents, advantage of special circumstances such as being a trade or industrial center, the economic impact of the tax, political and social pressures, and municipal overburden.

School districts have turned to nonproperty tax revenue in many states in an effort to meet the rising cost and demand for educational programs and services. In 1968-69, twenty-two states and the District of Columbia authorized the use of local nonproperty taxes by local school districts.[3]

Educational finance experts have raised some question concerning this trend. Johns and Morphet,[4] Mort,[5] and Burkhead,[6] have been concerned that local nonproperty taxation may have a tendency to prevent equalization of financial resources among the local school districts within a state due to the extreme variations *in the fiscal ability of various communities.*

Most of the local nonproperty taxes are levied and expended by city and county governments. It is estimated that 97 to 98 percent of all local taxes collected by school districts is derived from the property tax. Alford reported in 1957 that the property tax comprised almost 99 percent of all local taxes collected by independent school districts.[7] The Bureau of the Census does not report data on shared taxes in dependent school systems in such form as to determine the amount of nonproperty local tax revenue received by dependent city school systems from city governing bodies. Dependent school systems expend about 20 percent of school revenues.[8] Even when these dependent systems are taken into account, the estimate that from 97 to 98 percent of local school tax revenue is derived from the property tax for the nation as a whole is probably fairly accurate. However, local nonproperty taxes are of considerable importance in some states, therefore it was deemed desirable to analyze the impact of these taxes in a few states where substantial amounts of such taxes are being levied.

STATES USING LOCAL NON-PROPERTY TAXES FOR SCHOOLS

The states which utilized local nonproperty tax revenue for the support of schools in 1968-69 and the taxes levied are listed below:

Alabama —sales, gasoline, mineral release documentary, amusement, tobacco and alcoholic beverage.
Alaska —business license and raw fish
Arizona —auto lien, aircraft lien, educational excise and cigarette
Delaware —per capita
Kentucky —poll, whiskey, corporation franchise, utilities, occupation and excise

Louisiana —sales
Maryland —income
Minnesota —grain handling and mortgage registry
Mississippi —severance
Nebraska —license and retail power sales
Nevada —sales and motor vehicle license
New Mexico —motor vehicle, business license and occupation
New York —sales and income
North Carolina —poll, dog, beer and wine
Oklahoma —rural electrification, severance, auto license and intangibles
Pennsylvania —per capita, income, amusement, sales, occupational, real estate transfer, general business, mechanical device, golf and parimutuel
South Carolina —poll and dog
Tennessee —motor vehicle, sales, tobacco, business privilege and beer
Vermont —poll
Virginia —sales
Wyoming —poll and motor vehicle
District of Columbia —income, sales and use[6]

The most important local nonproperty taxes levied for schools are general sales, selective sales and income or payroll taxes. Local sales taxes are generally regressive in effect. Local income taxes are usually flat rate taxes on persons and/or business and tend to be proportional in effect rather than progressive.

Authorities on taxation generally agree that the states can collect the major local nonproperty taxes used for schools at less cost and with more efficiency than local governments. Furthermore, state-wide levy and collection of nonproperty taxes minimizes economic dislocation and tax competition among the local governments of a state.

PRESENT IMPACT OF LOCAL NONPROPERTY TAXES ON EQUALIZATION

A special study of the present impact of local nonproperty taxes for schools on financial equalization of educational opportunity was made by Moore[9] under the sponsorship of the National Educational Finance Project. The design of the study and the findings are reported in this section.

Selection of States and Sample Districts

Moore collected data on local nonproperty taxes from the following nine states: Alabama, Delaware, Kentucky, Louisiana, Maryland, New York, Pennsylvania, South Carolina and Tennessee. However, the local nonproperty taxes for schools in South Carolina only amounted to about 35 cents per pupil, and in Delaware only 10 districts levied local nonproperty taxes in 1968-69. Those two states are excluded from the data reported in this volume because the data from those states were insufficient for valid statistical analysis. It is not assumed that the seven states constitute a valid sample of the nation. Those seven states were selected because substantial amounts of local nonproperty taxes were levied in those states in a substantial number of districts in 1968-69.

Districts from each of the states were selected according to average daily attendance (ADA) classifications of 1,500-4,999; 5,000-9,999; 10,000-24,999; 25,000-49,999; and 50,000 and above. If the sample of districts in classifications was less than thirty, all of the districts were included. If the population of districts in an ADA population classification exceeded thirty, a stratified random sample of thirty was taken.

The same sample used in the ADA classifications was classified within each state into central city, suburban, independent city, or rural and also into highest and lowest quartiles according to the per pupil value of property in the district.

This method of sampling resulted in the selection of the following numbers of districts in each state:

Alabama —72
Kentucky —54
Louisiana —66
Maryland —24
New York —95
Pennsylvania —83
Tennessee —69

Data Collection and Analysis

The same data were collected from all states in the investigation. For each school district in the sample, nonproperty tax revenue totals from local sources for the fiscal year 1968-69 were collected. It was necessary in Tennessee and Maryland to obtain the operating revenue totals from the governmental unit to prorate the revenues transferred to the school district. These data were obtained from state reports.

In addition to the local operating revenue receipts, one measure of wealth for each district in the sample was used. This measure of wealth, equalized assessed valuation or assessed valuation per child in ADA, was used for comparative purposes in the investigation. Equalized assessed valuation or assessed valuation for each district was gathered from individual state reports provided for the National Educational Finance Project.

A Spearman Rank Correlation was computed to determine the relationship between local nonproperty tax revenue and wealth as measured by equalized or assessed valuation per pupil in average daily attendance for the total sample of school districts in each state. The .01 and .05 levels were utilized to determine if a significant correlation existed.

The assumption was made that a positive relationship indicated that local nonproperty taxes for schools tended to disequalize educational opportunity. A positive relationship indicates that as the wealth of the districts increases, the local nonproperty tax revenue per pupil in average daily attendance increases. An inverse relationship would then show that the less wealthy school districts were favored by local nonproperty tax revenues. An inverse relationship indicates that as the wealth of the district decreases, the local nonproperty revenue per pupil in average daily attendance increases.

A local nonproperty tax revenue per pupil in average daily attendance mean score was computed for each of the following classifications of school districts: rural, independent city, suburban and central city. In addition, the mean revenue per pupil from local nonproperty taxes was computed for the highest and lowest quartiles of districts in property valuation per pupil. The mean scores for the classifications were compared arithmetically to ascertain which classifications of school districts were profiting most from local nonproperty taxes.

Summary of Findings

As shown in Table 6-1, the correlation coefficients for the total number of sample school districts in a state showed a significant positive relationship between local nonproperty tax revenue per pupil and property valuation per pupil, in four of the seven states that were selected. In three other states, almost no relationship existed between the variables.

TABLE 6-1
CORRELATION BETWEEN LOCAL NONPROPERTY TAX REVENUE PER PUPIL AND PROPERTY VALUATION PER PUPIL

States	*Total Sample*
Alabama	.11182
Kentucky	.62277*
Louisiana	.11217
Maryland	.56261*
New York	.38120*
Pennsylvania	.18478
Tennessee	.45435*

*Significant at the .01 level.

This table understates the relationship between revenue per pupil from nonproperty taxes and property valuation per pupil because of the method of sampling. If the districts had been random sampled so as to include the total range in wealth per pupil of districts above 1,500 ADA, all of the correlations would probably have been higher. As stated above, the sample studied was a stratified sample selected by population groups which included the total range in numbers of pupils per district in districts with 1,500 or more pupils. The sample was selected in this manner in order that the districts might also be grouped into the classification of rural, independent city, suburban and central city.

Impact of Local Nonproperty Taxes by Population Classifications of School Districts. The population classifications utilized in this study were: rural, independent city, suburban and central city school districts. A rural school district was defined as a district with 1,500 or more pupils within a geographic area that does not include a city of 15,000 or more population. An independent city school district was considered to be in a city of 15,000 or more where the city(s) contained more than one-third of the total population in the school district's attendance area. A suburban school district was the area or satellite cities surrounding a central city. A central city school district was defined as a school district nearly coterminous with the geographic boundary of a city of 50,000 or more population. It should be noted that these definitions of rural independent city, suburban and central city differ somewhat from the definitions of these same classifications of districts used by Burns and reported in Chapter 5 of this volume. The principal difference between the two sets of definitions is in the size of the central cities. Burns used a much larger population size before he classified a city district as a central city.

Table 6-2 shows the mean revenue per pupil obtained from local nonproperty taxes by rural, independent city, suburban and central city school districts. Table 6-3 shows the rank within each state studied of revenue obtained by each class of school districts. It will be noted that in five of the seven states studied, the rural districts received the least amount of revenue per pupil from local nonproperty taxes and in four of the seven states, the central city districts received the most revenue. The average ranking for the seven states shows that the central city districts on the average receive more revenue per pupil from local nonproperty taxes followed in order by suburban, independent city and rural school districts.

Table 6-4 shows that in the seven states studied that the central city and suburban districts on the average, rank highest in valuation of property per pupil and that the rural districts

TABLE 6-2
MEAN REVENUE PER PUPIL FROM LOCAL NONPROPERTY TAXES, 1968-69

	Mean Revenue Per Pupil in Average Daily Attendance from Local Nonproperty Taxes			
States	*Rural Districts*	*Independent City Districts*	*Suburban Districts*	*Central City Districts*
Alabama	$ 15.24	$ 18.03	$ 14.11	$ 7.00
Kentucky	26.44	27.74	89.05	103.01
Louisiana	40.12	47.53	81.02	73.11
Maryland	63.55	96.57	100.92	97.43
New York	6.15	5.03	15.06	65.05
Pennsylvania	84.97	87.68	88.88	101.30
Tennessee	25.19	50.73	71.12	74.31

TABLE 6-3
RANK WITHIN STATE IN REVENUE FROM NONPROPERTY TAXES, 1968-69

	Rank Within State in Revenue Per Pupil From Local Nonproperty Taxes			
States	*Rural Districts*	*Independent City Districts*	*Suburban Districts*	*Central City Districts*
Alabama	2	1	3	4
Kentucky	4	3	2	1
Louisiana	4	3	1	2
Maryland	4	3	1	2
New York	3	4	2	1
Pennsylvania	4	3	2	1
Tennessee	4	3	2	1
Average Rank	3.4	2.9	1.9	1.7

TABLE 6-4
MEDIAN RANK WITHIN STATES IN VALUATION OF PROPERTY PER PUPIL

	Rank Within States in Median Value of Property Per Pupil			
States	*Rural Districts*	*Independent City Districts*	*Suburban Districts*	*Central City Districts*
Alabama	4	3	1	2
Kentucky	4	3	2	1
Louisiana	4	3	2	1
Maryland	4	3	1	2
New York	4	3	2	1
Pennsylvania	4	3	2	1
Tennessee	4	2	1	3
Average Rank	4.0	2.9	1.6	1.6

rank lowest. Comparing Table 6-4 with Table 6-3, it is observed that the districts that rank highest in valuation of property per pupil also rank highest in amount of revenue derived from local nonproperty revenue per pupil. Therefore, it is concluded that the levy of local nonproperty taxes by school districts only adds to the disequalization already existing among these classes of districts created by disequalities in property valuation per pupil.

Impact of Local Nonproperty Taxes Upon Districts in the Highest and Lowest Quartiles in Property Valuation Per Pupil. The total sample of districts from each state was ranked from highest to lowest in property valuation per pupil. Then, the average amount of revenue per pupil derived from local nonproperty taxes was computed for districts in the highest and lowest quartiles (highest one-fourth and lowest one-fourth) in valuation of property per pupil. The results of this computation are shown in Table 6-5. This table shows that in all seven states the districts that rank in the highest quartiles in valuation of property per pupil average receiving more money per pupil from local nonproperty taxes than the districts that rank in the lowest quartile in valuation of property per pupil. This is further evidenced that local nonproperty taxes had the general effect of disequalizing the financial equalization of educational opportunity in the seven states studied. There is no reason to believe that these taxes would have a different impact in other states.

TABLE 6-5
MEAN AMOUNT OF REVENUE PER PUPIL FROM LOCAL NONPROPERTY TAXES RECEIVED BY DISTRICTS IN THE HIGHEST AND LOWEST QUARTILES IN VALUATION OF PROPERTY PER PUPIL

	Mean Revenue Per Pupil Received by Districts from Local Nonproperty Taxes	
States	*Districts in Highest Quartile in Valuation of Property Per Pupil*	*Districts in Lowest Quartile in Valuation of Property Per Pupil*
Alabama	$ 13.37	$ 7.31
Kentucky	50.28	16.22
Louisiana	51.50	42.03
Maryland	95.59	63.25
New York	33.51	3.21
Pennsylvania	96.84	78.25
Tennessee	52.82	23.31

POTENTIAL IMPACT OF LOCAL NONPROPERTY TAXES ON EQUALIZATION

The study discussed above was based on an analysis of the impact of nonproperty taxes *actually levied* by certain classifications of school districts in seven states. An examination of the data used in the above study shows that in some states, many districts of low wealth and a few districts of great wealth did not levy local nonproperty taxes for schools although such taxes were authorized. It is hypothesized that some districts of low wealth did not levy local nonproperty taxes because little revenue could be derived from that source and that some of the districts of great wealth did not levy such taxes because the revenue was not needed or such districts desired to profit economically from tax competition. In any event, it is desirable that the *potential impact* of local nonproperty taxes on financial equalization of educational opportunity be examined if all districts in a state levy such taxes. Fortunately, two studies, discussed below, are available which present some evidence on this issue.

Studies in Kentucky[10] and Indiana[11] have shown that legislation authorizing local nonproperty taxes for education tends to increase the revenue disparities among local school districts, and, in effect, tends to disequalize educational opportunity.

The Kentucky study showed that the three permissive local nonproperty taxes in Kentucky—occupational, utility, and excise—increased the disparity between the haves and the have-nots. Table 6-6 shows the potential ranges in revenue per pupil to be derived from local nonproperty taxes in selected county districts in Kentucky. Projections of the fiscal ability of the counties in that state indicated that the occupational tax would yield as much as $64 per pupil in average daily attendance in a large suburban county school district while the same tax would raise only $3 in a poor rural county. The permissive tax on utilities in the same state would raise $41 per pupil in one county and only $1 per pupil in another. The excise tax in a similar manner would yield $51 per pupil in a more affluent county and only $3 per pupil for children in a less able part of the state. The data showed that the yield from the three taxes in one poor county of that state would have been: occupational tax, $3 per

TABLE 6-6
ESTIMATED REVENUES FROM LOCAL NONPROPERTY TAXES IN SELECTED COUNTIES IN KENTUCKY

County	*Equalized Assessed Valuation Per Pupil ADA**	*Occupational Tax Yield Per Pupil ADA*	*Utilities Tax Yield Per Pupil ADA*	*Excise Tax Yield Per Pupil ADA*
Fayette	$40,291	$56	$33	$47
Daviess	37,365	52	28	36
Jefferson	36,129	64	29	51
Martin	11,038	3	1	3
Owsley	10,816	3	4	3
Breathitt	7,574	6	2	3

*Property equalized at 100 percent of fair cash value, Public School Financial Analysis, Kentucky Department of Education, February, 1970.

pupil; utilities tax, $1 per pupil; and excise tax, $3 per pupil. Since this one school district had only 2,659 in average daily attendance, the revenues from the tax would not have been sufficient to pay for tax collection, much less to enhance the budget of the schools. From Table 6-6, one can see that the local nonproperty taxes create wider disparities than local property taxes. The greatest wealth differential based on the equalized assessed valuation of property in the selected districts is a little over 5 to 1 while the ability differential of the occupational tax is more than 21 to 1, the utilities tax is 33 to 1, and the excise tax is 17 to 1.

In Indiana, Wilkerson has shown that even though a local one-cent sales tax and a local one percent income tax would each raise, at the time of his study, 100 million dollars with a statewide per pupil yield of $92 and $91 respectively, such taxes would result in substantial revenue disparity among counties. He noted that the sales tax would raise $135 per pupil in ADA in Steuben County while raising only $33 per pupil in Warren County. The result is similar with the income tax which would yield $122 per pupil in ADA in Allen County and $37 per pupil in Brown County. Table 6-7, which shows high and low tax-yield districts, indicates that these local nonproperty taxes increase the ability differential among the counties of Indiana. In terms of property values the high and low tax-yield counties had no more than a 2.2 to 1 differential, while the ability differential among the same counties measured in terms of sales tax yield was over 4 to 1, and with the income tax, it was over 3 to 1.

TABLE 6-7
ESTIMATED REVENUES PER PUPIL IN ADA FROM LOCAL NONPROPERTY TAXES IN SELECTED COUNTIES IN INDIANA

County	*Assessed Valuation of Property Per ADA*	*Yield From One Cent Sales Tax Per Pupil ADA*	*Yield From One Percent Income Tax Per Pupil ADA*
Allen	$12,160	$123	$122
Steuben	11,706	135	92
Switzerland	10,955	45	45
Marion	10,523	124	116
Warren	10,380	33	51
Brown	5,065	38	37

SUMMARY AND IMPLICATIONS FOR SCHOOL FINANCING

Following is a brief summary of the findings reported in this chapter:

1. Twenty-two states authorized the levy of some type or types of local nonproperty tax for schools in 1968-69.

2. The use of local nonproperty taxes has increased during recent years but local governments, other than school districts at the present time, are making the greatest use of such taxes.

3. It is difficult to compute the amount of local nonproperty tax revenue received by school districts throughout the nation. However, it is probable that school districts for the nation as a whole, still obtain from 97 to 98 percent of their local tax revenue from the property tax.

4. A special study was made of the impact of local nonproperty taxes on the financial equalization of educational opportunity in seven states authorizing such taxes. Districts were classified as rural, independent city, suburban and central city. It was found that the central city districts on the average in the seven states studied, received the greatest amount of revenue per pupil from local nonproperty taxes, followed in order by the suburban, independent city and rural districts. The central city and suburban districts ranked highest in property valuation per pupil, followed in order by the independent city and rural districts.

Districts were also classified into the highest and lowest quartiles in terms of value of property per pupil. The average income per pupil for each quartile was then computed. In all seven states, it was found that the districts that ranked in the highest quartile in property valuation per pupil averaged receiving more per pupil in local nonproperty tax revenue.

The Spearman Rank correlation was computed for the total sample of districts in each state. In all seven states, the correlation between property valuation per pupil and revenue per pupil actually received from local nonproperty taxes was positive and in four of the seven states, it was highly significant.

The evidence produced in the study made by Moore[12] clearly indicated that, in the seven states studied, the levy of local nonproperty taxes for schools tended to disequalize the financial equalization of educational opportunity.

5. Studies made in Kentucky and Indiana show that the levy of local nonproperty taxes for schools has the potential of dis-

equalizing the financial equalization of educational opportunity more than it is presently made unequal by variations among districts in property valuation per pupil.

6. Experts on taxation generally agree that state governments can levy and collect most important types of nonproperty taxes more economically and efficiently than local governments.

7. Large, wealthy urban districts can obtain substantial revenue from local, nonproperty taxes. This is especially true of those districts that are trading centers. Such districts can use such taxes as sales taxes to impose a part of their incidence on persons from less wealthy districts who come to cities to trade. This is the reverse of financial equalization. Furthermore, the levy of local sales and income taxes by large, wealthy urban and suburban districts may hinder the state in levying such taxes because of the political opposition of members of the legislature from the areas profiting locally from the levy of such taxes. This would result in a shortage of state revenue which would reduce the power of the state to discharge its responsibility for equalizing educational opportunity within the state.

FOOTNOTES

1. Paul Mort, *et al., Public School Finance.* New York: McGraw-Hill, 1960, p. 150.

2. Roe L. Johns and Edgar L. Morphet, *Financing the Public Schools,* New Jersey: Prentice-Hall, Inc., 1960.

3. Thomas L. Johns, (ed). *Public School Finance Programs,* 1968-69. United States Department of Health, Education and Welfare, Office of Education, Washington, D. C.: United States Government Printing Office, 1969.

4. Morphet and Johns, *Ibid.*

5. *Ibid.,* Mort.

6. Jesse Burkhead, *State and Local Taxes for Public Education,* Syracuse, N. Y.: Syracuse University Press, 1963.

7. Albert L. Alford, *Nonproperty Taxation for Schools: Possibilities for Local Application,* Washington, D. C.: United States Government Printing Office, 1963.

8. *Ibid.,* Alford, p. 22.

9. Duane O. Moore, *The Fiscal Impact of Local Nonproperty Tax Revenues on School Districts.* Doctoral Dissertation, Gainesville, Florida: University of Florida, 1970.

10. Kern Alexander and Charles Whaley, *Beyond the Minimum,* Kentucky Education Association, 1967, pp. 126-131.

11. William R. Wilkerson, *Potential Impact of County Sales and Income Taxes on Public School Finance,* Unpublished Paper, Indiana University, 1970, pp. 3-5.

12. *Ibid.,* Moore.

CHAPTER 7

Historical Development of Federal Aid Programs

SIDNEY TIEDT

One of the most persistent problems in American education has been determining the role of the federal government in education. What role, for example, should the federal government play in funding, organizing, and improving education? From the beginning of our country the role of the federal government has never been clear, for education began as a local responsibility and concern and was, therefore, embodied as a state responsibility. Only recently have we begun to explore the potential role of the federal government in influencing American education. It is hoped that this chapter will be able to highlight some of the questions and issues in this area of social and public policy.

Today, we find many writers who are concerned essentially with the economics of education, pointing up the importance of education not only as a cost, but also as an investment. We no longer justify education on individual and cultural grounds alone, but have become aware of education as a basis for economic, political, social, and in fact, international development.

One of the fastest growing aspects of our economy is the Knowledge Industry. Writers have estimated that half of the total income of the United States in 1985 will be derived from the Knowledge Industry. Machlup defines knowledge in "The

Production and Distribution of Knowledge in the United States"[1] as "anything somebody knows." Thus, education is clearly included, as is research development, printing and publishing, the theater, films, television, telephone, and the telegraph. Machlup defines education, furthermore, as "the business of retailing old knowledge and inculcating the habit of acquiring further knowledge." He points out that the education enterprise has quadrupled since 1930 and accounts for approximately 45% of the so-called Knowledge Industry. He corroborates the increased importance of education, citing the fact that the average member of the work force in 1960 had spent nearly twice as many days in school as a similar worker in 1910.

We can conclude that education is not only big business, but is intimately involved in our economic system and in our total society. Matters concerning education, therefore, literally concern the whole nation. In this chapter we will focus on determining (1) the background of the federal government's present involvement in education and (2) the arguments pro and con regarding the government's involvement in education.

BACKGROUND

It is generally conceded that public education began in this country with the enactment of the Massachusetts Bay Laws of 1642 and 1647. These acts were an attempt to educate people sufficiently to enable them to read the Bible. These laws exemplify an early use of education to serve societal aims, for it was the concern of seventeenth century society that the Old Deluder, Satan, be kept from corrupting the minds and the hearts of the good New England men.

Ordinances of 1785 and 1787

One of the first examples of the government's direct involvement in education in pre-federal days is the Ordinance of 1785. The Survey Ordinance of 1785 reserved section 16 in every township to be used for the endowment of schools within the township. These ordinances also serve as one of the few examples of *general* types of federal aid to education as opposed to the *categorical* type.

One of the few statements of government policy pertaining to education is stated in the Northwest Ordinance of 1787, "Religion, morality, and knowledge being necessary to good government and the happiness of mankind, schools and the means of education shall forever be encouraged." There remains some doubt whether the primary purpose of this ordinance was to aid education, for a prime objective was also obviously that of settling the great land that was available at the time. Daniel Webster, however, in discussing the Northwest Ordinance of 1787, clearly states, "It set forth and declared it to be a high and binding duty of government to support schools and the means of education."

The Morrill Act

In 1862, President Lincoln signed the Morrill Act. This act, seen by some authorities as one of the first attempts by the federal government to establish policy in regard to education, provided 30,000 acres per Congressman for the support of an institution of higher education. Part of the concern of Congress in passing this act was to provide for a college which would improve knowledge in agriculture and the mechanical arts. Presently, the colleges and universities established under this act now include 68 institutions with an enrollment of approximately 20% of all undergraduates.

Office of Education

President Andrew Johnson, in 1867, provided for a department of education with Henry Barnard as its first commissioner. At one time the Department of Education was in the Interior Department. In 1930, however, it was placed under the administration of the Federal Security Agency, and in 1953, it became part of the Department of Health, Education, and Welfare where it resides at the present time. In the early days, the U.S. Office of Education acted chiefly as a collection agency, collecting statistics and information about education and publishing such statistics. In recent years, however, the United States Office of Education has taken on additional duties relating to the administration of increased federal funds for education and also increased is emphasis on leadership and encouragement of innovation and research in education.

Another way of looking at the change taking place in the United States Office of Education is to compare the size of the

Office for the fiscal year of 1956 and that of 1970. In 1956 the Office had 555 employees and a budget of $166.3 million, while fourteen years later, in 1970, it had 2,900 full time employees, plus 500 part-time employees, and its budget was $3.6 billion.[2]

Smith-Hughes Act

The Smith-Hughes Act had as its major purpose the fostering of vocational education and home economics for high school students. Historically, the Smith-Hughes Act is one of the first examples of federal participation in education below the college and university level. Passed in 1917, the act provided for the salaries of teachers and supervisors of agricultural activities and salaries of teachers of certain trades, home economics, and industrial subjects. It also provided aid for teacher trainees in these subject areas and supplied additional monies for the administration of the bill.

Lanham Act and Impact Laws

The Lanham Act, passed in 1941, was aimed at equalizing the tax load through federal payments that were, in effect, "in lieu of taxes." During the Second World War many towns and school districts were overwhelmed by influxes of people employed by defense industries and military establishments. The act made monies available to school districts for buildings and school services, depending upon the number of individuals employed on federal properties.

Although this act was little noted at the time, it has proved to be one of the most politically popular of the federal measures to aid education. During the Korean War the so-called Impact Laws, Public Laws 815 and 874, were enacted. These laws were essentially the same type of law as the Lanham Act of 1941, for the idea was that the federal government had a responsibility to help school districts to care for increased population due to federal activity. It should also be clarified that, since the federal government pays no local taxes, these monies were meant to redress the balance.

The Impact Laws, passed originally in 1950, are still in effect and are very popular with the school administrators, as well as with Congress. The executive branch of the government has made several attempts to reduce the Impact Laws, but even such a staunch opponent of federal aid to education as Senator Barry Goldwater has supported the Impact Laws. Public Law 874, part of this Impact group, is especially significant for it represents the first time that the federal government granted funds to school districts for general operating costs; that is, the grants made can be used for any aspect of the education program. Public Law 815 provides monies essentially for school construction.

National Defense Education Act

The National Defense Education Act, known by the acronym, NDEA, was passed in 1958, a direct response on the part of Congress to Soviet space successes. This reaction resulted in a major re-evaluation of our school system. NDEA, aimed at stimulating and strengthening education in science, foreign languages, and mathematics, consisted of ten titles. Below is a listing of these titles which should provide some conception of the scope of the act.

I. General Provisions—Purpose and Definition.
II. Loans To Students in Higher Education.
III. Financial Assistance For Strengthening Science, Mathematics, and Modern Foreign Language Instruction.
IV. National Defense Fellowships.
V. Guidance, Counseling, and Testing; Identification and Encouragement of Able Students; Counseling and Guidance Training.
VI. Language Development Centers for Research and Studies; Language Institutes.
VII. Research and Experimentation In More Effective Utilization of Television, Radio, Motion Pictures, and Related Media For Educational Purposes.
VIII. Area Vocational Education Programs.
IX. Science Information Service.
X. Improvement of Statistical Services of State Educational Agencies.

Several examples will suffice to note the tremendous impact of NDEA on education. Since its passage, state departments of education have approved more than 200,000 projects for local schools covering the purchase of equipment in science, mathematics, and foreign language.[3] The number of language labs, for example, has increased from 46 in 1938 to nearly 6,000 in 1963.[4] The major criticisms of the original NDEA was that it tended to unbalance the school curriculum with its emphasis on mathematics, science, and the foreign languages. The second criticism pertains to the fact that it aided both private and public institutions. In general, however, the kindest compliment of all is to have an act not only continued, but to have it expanded. In 1963, the act was expanded and amended to include guidance, counseling, and testing programs, and in 1964 it was further expanded to cover almost all areas of the school curriculum.

Higher Education Facilities Act

Sometimes called the Morse-Green Bill after the former Senator and Representative from Oregon, the Higher Education Facilities Act of 1963 states its purpose thus: "To assist the nation's institutions of higher education, to construct needed classrooms, laboratories, and libraries in order to accommodate mounting student enrollments and to meet the demands for skilled technicians and for advanced graduate education."

This Higher Education Act might be called a "bricks and mortar" act, for the major provisions are ones that involve expenditures to schools to encourage construction. The following are the major areas covered by the Higher Education Facilities Act:

(1) Funds to all four year colleges, junior colleges, and technical institutions to build libraries and classrooms for instruction in science, language, and mathematics,

(2) Loans extending over a period of fifty years, carrying an interest of 3 5/8% for all types of classroom construction,

(3) Approximately 50 million dollars to communities for constructing junior and community colleges, and

(4) Finally, funds to establish graduate centers throughout the country.

In making its allocations, priority is given to institutions that are expanding. Matching funds in this bill were required on a two-to-one basis, thus generating a great deal of money for school construction.

One of the issues posed by the passage of this act was its inclusion of church-supported and private schools. However, generally the concern has not been so great for the aiding of private colleges as has been the concern for aiding private and parochial schools at the elementary and secondary levels.

Civil Rights Act

While not directly pertaining to education, the Civil Rights Act passed in 1964 had as one of its major purposes the desegregation of public schools. Several titles, therefore, of the Civil Rights Act directly involve education. For example, Title IV allows the Attorney General to initiate action against school boards that deny equal rights to children. Further, it states, "No person in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in or denied the benefits of, or be subject to discrimination in any program or activity receiving federal financial assistance." The emphasis in the Civil Rights Act, in spite of the strong language of the above portion, remains on voluntary compliance.

Title IX requires the U.S. Office of Education to determine whether, in effect, equality of educational opportunity is being denied any individual. The law further provides a great deal of help to individuals carrying out programs of desegregation. In fact, one of the portions of Title IX provides financial assistance for colleges and universities to conduct institutes that would provide aid to school people facing desegregation problems. Like the Economic Opportunity Act, the Civil Rights Act is not directly an education bill; yet certainly its strong thrust is towards helping educators provide for educational opportunity.

Economic Opportunity Act

This bill, sometimes called the War on Poverty Bill, was passed in 1964 as part of the whole program known as the Johnson Administration's *Great Society*. While not strictly an aid to education or a public schools bill, this bill did carry educational implications.

Title I of the Economic Opportunity Act established the Job Corps to provide training for 40,000 men and women in residential centers throughout the country. These youngsters were of high school age and in all probability were the ones who had dropped out of school. The program essentially was one intended to provide basic literacy skills for youngsters, as well as training in job-related skills. One interesting innovation is that several of the job centers were operated by private industry. For instance, the job center in Northern California was operated by Litton Associates, a diversified electronics company.

Title II covers urban and rural community action programs. Under this proposal the federal government funded up to 90% of the cost of projects in areas such as job training, vocational rehabilitation, health, and welfare. A part of this program provided training courses for basic education and work experience demostration.

A type of domestic peace corps program provided in the Economic Opportunity Act was a program called Volunteers in Service to America (VISTA). These volunteers serve throughout the country helping students and work not only in schools, but on Indian reservations, with migratory workers, and in mental hospitals.

One of the most popular features of this act has been the Head Start Program. This is, of course, directly related to education, particularly the pre-school aspect of education, and has proved to be a very popular method of up-grading the deficient backgrounds of poor youngsters. The only problem so far has been that the children in the programs tend to lose their gain when they enter into the regular school program. The Head Start Program provides for teacher aides, physical exams, and many desirable classroom instructional aids that make for better teaching.

Elementary and Secondary Education Act

Sometimes designated as the centerpiece of the Great Society, the Elementary and Secondary Education Act (ESEA), passed in 1965, is indeed a landmark piece of legislation. Broad in its concept and hope, it directly involves over 90% of the nation's school districts. The purpose of this act can be stated broadly as follows: (1) to strengthen the elementary and secondary education of the educationally disadvantaged child, (2) to provide school libraries, resources, textbooks, and other instructional materials, (3) to fund supplemental education centers, (4) to broaden cooperative research, and finally (5) to strengthen state departments of education.

The purpose of Title I is to provide (through extension of

Impact Law 874) assistance to school districts for the education of children of low income families. To qualify for aid, school districts must have students whose family income was less than $2,000 per year. This was raised to $3,000 in 1966. Roughly 90% of the school districts in the country, it is estimated, will be eligible for aid under this criterion. Payments are made on the basis of the average per pupil expenditure in any state. The cost of this program for the first year for this one title was 1.06 billion dollars.

Basically the philosophy behind Title I assumes a very close relationship between lack of educational opportunity and poverty. It has been pointed out, for example, that the ten states with the lowest per capita personal income have draft rejection rates based on mental tests well above the average for all fifty states. Further information tells us that dropout rates are high where income rates are low.

The local school district under the Elementary and Secondary Education Act can use the funds allocated to it for almost any purpose as long as the benefit accrues to the disadvantaged student. State departments have set up bureaus, departments, and offices whose function it is to see that local plans are functional in terms of providing the best possible education for the disadvantaged youngster with the money allocated. The bill also provides, furthermore, that funds can be shared with private and parochial schools if the person benefitting is the disadvantaged child.

Under this act the President is to provide for a National Advisory Council on the education of disadvantaged children. The council reviews the various state and local plans to determine how well the purpose of this act is being carried out by the school districts. Some of the programs that are operated by school districts under Title I of the Elementary and Secondary Education Act include:

Teacher aides.
Classes for talented youngsters.
Pre-school education programs.
Enrichment programs after school, on Saturday mornings, and during the summer.
Special programs for non-English-speaking youngsters.
Provisions for books, clothing, and meals.
School health and psychological services.

Increased guidance services.
In-service education for teachers.
Additional teaching personnel to provide for smaller classes.
Providing new curriculum material for the disadvantaged.
Remedial reading centers.
Remedial language centers.
Day camp programs.
On-the-job training for high school students.
Work experience programs.

Title II of the Elementary and Secondary Education Act provides money for school library resources, textbooks, and other instructional materials. Research has pointed out the relevance of the school library to academic programs in the school. Where there are central libraries, children not only read more, but also have significantly greater achievement records. In spite of this knowledge, however, almost half of the public and non-public elementary schools have no central library. In general, the high schools are better off, but it is estimated that nearly 1/3 of all elementary and secondary school youngsters attend a school without a central library.

The provisions provided under Title II originally amounted to $100 million, which is allotted to the states for the purchase of books, periodicals, documents, magnetic tapes, records, and other printed and published materials. The basis for allotment is the number of students enrolled in both public and non-public elementary and secondary schools within the state. Since materials are to be provided to both public and non-public institutions, the arrangement is usually made that local districts hold Title II materials that are then provided to private schools on a loan basis. Finally, funds are not to be used to substitute for local or state funding, but are to be used rather for improvement of instruction. Each state, of course, will set up its own program in accord with its constitutional and legal requirements. Thus, administration of the program will vary greatly from state to state.

Title III provides for supplemental education centers and services. The difference between the good school and the poor school is frequently that the good school is able to provide special services in math, science, and foreign language, the arts, and music, as well as technical services. Research reveals that approximately 75% of our elementary schools do not have the services of a guidance counselor, 70% of our secondary schools do not have language laboratories, and in some forty states there are a few high schools that do not have science laboratories.

Under the provisions for Title III, supplemental education centers are set up for three basic purposes: (1) to provide educational services that the community is not able to provide itself, (2) to up-grade the existing services provided by local educational authorities, and (3) to develop exemplary model programs for the community. The aim of this title is to provide for a great many services to school districts that no one district could provide. Services might include adult education, remedial instruction, special programs for gifted children, provisions for health, as well as language centers, and so forth.

Title IV provides for educational research and training. Many writers have noted the small percentage of the school budget that is devoted to research and development. It is estimated that before the passage of this act in 1965, approximately 1/5 of 1% of the education budget was spent on research and development. (It might be noted, in comparison, that many private industries allocate as much as 10% of their annual expenditures to research and development activities.) The Cooperative Research Act in 1954 provided a stimulus to research in education. Title IV of ESEA amended the Cooperative Research Act and authorized $100 million over the succeeding five years to provide for national and regional research facilities. The major purpose of this program was to develop and test educational ideas, and at the same time disseminate these ideas to the schools that they serve. It is also the purpose of Title IV to involve other groups in research, for instance, artists, historians, and mathematicians, as well as private research organizations.

Title V strengthens state departments of education. It is felt that in order for education to improve, the state departments must play a more significant role. Title V authorized $25 million annually for the improvement and expansion of state department programs. These funds are utilized to improve the effectiveness of the present state departments.

National Foundation of the Arts and the Humanities

In 1965 the President established the National Foundation of the Arts and the Humanities. This foundation, similar in some ways to the National Science Foundation, is an independent agency with two branches. One is a National Endowment for the Arts, while the other is a National Endowment for the Humanities. Each endowment is provided with a council consisting of private citizens who give the endowment advice and guidance.

The National Foundation of the Arts and the Humanities Act allows the chairman of the National Endowment of the Arts to provide a program of grants and aid to groups, or in appropriate cases, to individuals engaged in or concerned with the arts. Thus, persons could be involved in projects of cultural and artistic significance—production of artistic efforts, projects that would encourage and assist artists, workshops to develop the appreciation and enjoyment of the arts by the citizenry, and other projects that might include research, surveys, or general planning in the arts.

The chairman of the National Endowment for the Humanities has similar authorization to promote progress and scholarship in the humanities and to support research that strengthens the research potential in the United States in the humanities. This might be done through grants, loans, or other types of assistance in the form of fellowships to institutions or individuals, to encourage the interchange of information, to foster greater understanding in this area, and to support the publication of scholarly works in the humanities.

This act represents one of the few attempts on the part of the government to aid the arts. It is obviously an attempt to redress the balance somewhat between the two cultures identified by C. P. Snow, science and humanities.

International Education Act

President Johnson recommended to Congress a broad, long-range plan of educational development in the field of international education. In his original message to Congress the Presidet made twenty recommendations—some of which were contained in the International Education Act of 1966 (PL89-698). The most important part of this program is under Title I, which consists of two grant programs. The first authorizes the establishment of centers for advanced international study at the graduate level. Providing national and international centers for research and training, these centers might concentrate on specific geographic areas or they might focus on particular fields or issues.

The second part of Title I creates undergraduate programs of a wide variety. These grants are aimed at helping colleges and universities in planning programs that will improve their undergraduate instruction. Programs created might include training of faculty members in foreign countries, expanding foreign language offerings, visiting programs that encourage foreign teachers to visit institutions, teaching and research, and curriculum development. Congress authorized $40 million for the fiscal year 1968 and $90 million for 1969. This act, very broadly conceived, did not, however, gain the required funding.

Educational Professions Development Act

President Johnson, in 1967, signed into law the Education Professions Development Act with the stated purpose "To coordinate, broaden, and strengthen programs for the training and improvement of the qualifications of educational personnel in order to provide a better foundation for meeting critical needs for such personnel." In order to carry out this mandate, the Act is divided into the following major parts:

Part A has three major operations:

1. A fifteen member National Advisory Council is to be created.
2. The Commissioner of Education is to assess the needs of education at all levels and in all subject areas.
3. The staff of the Bureau of Education Professions Development is to encourage better qualified people to enter the education professions.

Part B has two major parts:

1. Calls for expansion of the Teacher Corps.
2. A new state grant program to attract teachers and teacher aides.

Part C continues graduate programs originally under the Higher Education Act.

Part D expands and extends the NDEA institute programs formerly under Title V-B and XI of the NDEA.

Part E provides grants for inservice and pre-service training for members of institutions of higher education.

Part F provides for the training program for vocational educators.

The Education Professions Development Act is an attempt to consolidate all training programs involving educational personnel under one act.

Vocational Education Amendments of 1968

The major purpose of these amendments was to redirect, reorganize, and expand the nation's vocational education effort. One of the major thrusts of this act is to give special attention to the training of individuals who have in the past been ignored. Twenty-five percent of all new funds, and a substantial part of existing funds, must go for education of the disadvantaged. Another example is the requirement that ten percent of all permanent funds must go for the education of handicapped children.

The federal government has been involved in vocational education since the Smith-Hughes Act of 1917, which emphasized primarily the areas of vocational agriculture and home economics. The George-Barden Act of 1946 was an attempt to bring up to date the manpower skills in our nation. More flexibility came into existence with the Vocational Education Act of 1963. The Vocational Education Amendment of 1968 provided even greater flexibility in programs for state and local school districts, something that has not always existed in previous vocational legislation. Further, the 1968 Amendment doubled the authorization for vocational education. Authorizations for the first four years are:

1969	$542,100,000
1970	$857,650,000
1971	$870,150,000
1972	$910,150,000

One must keep in mind that these are authorizations, not appropriations. That is another question requiring its own legislative enactment. However, as one looks at the Vocational Education Amendments of 1968, one must concede that it represents a massive attempt to bring vocational education up to date.

Higher Education Amendments of 1968

Like the Education Professions Development Act, the Higher Education Amendments Act of 1968 brings together most, if not all, of the legislation involving higher education into one Act.

The Higher Education Amendment of 1968 extends and improves four education acts, the National Defense Education Act, the Higher Education Facilities Act, the International Education Act, and the Higher Education Act of 1965.

Six new programs were launched with the Higher Education Amendments of 1968:

1. *Networks for Knowledge.* The basic idea is to strengthen smaller colleges by having them cooperate and coordinate their efforts with stronger colleges and universities. This will be done by pooling resources, staff, and information.
2. *Education for Public Service.* The purpose is to provide training for individuals working in the area of public service on the federal, state, or local levels. This authorization will allow colleges and universities to provide appropriate education for those students wishing to enter the public service.
3. *Cooperative Education.* This provision enables colleges and universities to initiate or enlarge their programs of Cooperative Education.
4. *Improvement of Graduate Programs.* This portion of the bill provides for the improvement of graduate programs.
5. *Special Services for Disadvantaged Students.* This is a program to help economically deprived students enter college. It pulls together many of the programs such as Upward Bound, which is transferred from the Office of Economic Opportunity to the Office of Education, and puts them under the rubric of the Higher Education Amendments Act.
6. *Law School Clinical Experience Program.* This section authorized the expenditure of funds to provide for clinical experience in the training of law students.

Summary of Federal Legislation Affecting Education—1777 to 1968

Following is a chronological summary of the principal federal legislation affecting education from 1777 to 1968:

1777 Initiation of direct administration of education programs

—the instruction of military personnel, including schooling in mathematics.

1785 Commencement of aid to territories for education by endowment of schools with public lands.

1787 Commencement of endowment of public institutions of higher education with public lands—Northwest Ordinance: "Schools and the means of education shall forever be encouraged."

1802 Establishment of the first federal institution of higher education—Military Academy at West Point.

1804 District of Columbia—federal provision for education begins.

1862 The First Morrill Act—initiated federal policy of aid to states for agricultural and industrial education through land grants for colleges.

1867 Federal Department of Education established by Congress; later the Office of Education.

1874 Introduction of the principle of federal-state matching of funds for education.

1887 Hatch Act—encouraged scientific investigation in agriculture.

1890 The Second Morrill Act—introduction of federal grants of money for college instruction in specified areas of learning.

1914 Smith-Lever Act—matching of funds for agricultural and home economics instruction.

1917 The Smith-Hughes Act—began policy of promoting vocational education below college level through assistance with teachers' salaries.

1918 Rehabilitation training for disabled veterans.

1919 Federal surplus property available to educational institutions.

1920 The National Defense Act of 1920—direct relationship between the federal government and educational institutions.

1920 Smith-Bankhead Act—federal-state cooperation in vocational rehabilitation; education for people disabled in industry.

1933 Federal Emergency Relief Administration—supported educational programs.

1933 Civilian Conservation Corps—provided vocational education.

1935 National Youth Administration—employment for college students.

1935 Bankhead-Jones Act—increased support for land-grant colleges.

1936 Promotion of Inter-American Cultural Relations Convention—international educational exchanges.

1936 George-Deen Act—extended the Smith-Hughs Act.

1937	National Cancer Institute Act—provided fellowship grants.
1941	Lanham Act—provided educational assistance for schools in communities affected by the federal government's activities.
1943	Vocational Rehabilitation Act—aid for disabled veterans.
1944	The Servicemen's Readjustment Act—G.I. Bill, educational aid for veterans.
1944	Surplus Property Act—government surplus given to educational institutions.
1946	National School Lunch—gave funds and food to public and non-public schools; school milk program added in 1954.
1946	George-Barden Act—extended Smith-Hughs Act by increasing appropriation.
1948	Smith-Mundt Act—program of international educational exchanges.
1949	Federal Property and Administrative Services Act—surplus property disposal for educational, health, and civil defense purposes.
1950	The National Science Foundation Act—promoted progress in science through scholarships and fellowships in fields of science.
1950	The Housing Act—low interest rates for loans to institutions of higher learning for building of housing facilities.
1950	Federal Impact Laws (P.L. 815 and P.L. 874)—extended the Lanham Act of 1941; provided assistance to communities affected by activities of the federal government for construction and operation of schools.
1952	National Science Foundation—fellowship program.
1954	Cooperative Research Act—authorized the Office of Education to conduct cooperative research with colleges, universities, and state educational agencies.
1956	Library Services Act—grants for improvement of library facilities.
1958	United States and Union of Soviet Socialist Republics agree to exchange study groups in educational and cultural fields.
1958	The National Defense Education Act—provided for graduate fellowships in science, mathematics, foreign languages, counseling and guidance, educational technology.
1958	Fogarty-McGovern Act—federal grants to train teachers of mentally retarded children.
1961	Area Redevelopment Act—training of persons in redevelopment areas.
1961	Peace Corps Act—supplied teachers and technicians to underdeveloped nations.
1961	Juvenile Delinquency and Youth Offenses Control—study of problem.

1962	Manpower Development and Training Act—up-to-date training for the unemployable.
1963	Health Professions Educational Assistance Act—construction of facilities and student loans.
1963	Mental Retardation Facilities and Community Mental Health Centers Construction Act—training of teachers and demonstration projects.
1963	Higher Education Facilities Act of 1963—grants to all colleges, public and private, for improvement of facilities.
1963	Amendments to the Manpower Development and Training Act—expansion of provisions of law, 1962.
1963	Vocational Education Act of 1963—construction of vocational schools with expanded offerings; extended Impact Laws (1950) and NDEA (1958).
1964	The Civil Rights Act of 1964—desegregation of the schools enforced and assisted.
1964	Juvenile Delinquency and Youth Offenses Control Act Amendment—new programs and special studies.
1964	Economic Opportunity Act of 1964—war on poverty through retraining and remedial education and other opportunities.
1964	Amendments to National Defense Education Act—extended and expanded to include areas of English, reading, history, and geography.
1965	Elementary and Secondary Education Act—federal grants to states for allocation to school districts with low income families.
1965	National Foundation for the Arts and Humanities—foundation to support humanities and the arts through grants.
1965	Higher Education Act of 1965—aid to colleges, students, and teachers.
1966	International Education Act—to provide a strengthening of American educational resources for international studies and research.
1967	Education Professions Development Act—to coordinate, broaden and strengthen programs for the training and the improvement of educational personnel.
1968	Vocational Educational Amendments of 1968—redirect, reorganize and expand vocational education.
1968	Higher Education Amendments of 1968—extended and improved four major education acts and authorized six new programs.
1968	Handicapped Children's Assistance Act—federal effort to help handicapped children at pre-school level.

ARGUMENTS FOR AND AGAINST FEDERAL AID

Some of the historical arguments will be presented in this section. The arguments presented are those generally considered the most cogent and powerful. It is important to review these arguments, not only for their historical importance, but also for their present impact.

Arguments in Opposition to Federal Aid to Education

In this section an analysis will be made of the major arguments presented by those individuals and groups who are opposed to any increase in the federal government's involvement in education.

Equalizing Educational Opportunity. Opponents to federal aid believe that it is impossible to equalize educational opportunity, that the task is far too difficult for any government to carry out. Even if it were possible to equalize educational opportunity, they maintain, they are not sure that it would be for the betterment of education. Equalizing educational opportunity is seen as dragging down the educational standard to a mediocrity that would eliminate the outstanding schools. This attempt, which sounds at first blush as one that would improve schools, would actually be detrimental to our system.

Schools should differ from each other because states, communities, and neighborhoods differ, and in our great pluralistic society, this is seen as a strength of our educational system. It is not possible to equalize education without equalizing our system economically, politically, and socially. It is not possible to equalize education without bringing all of society to a level of conformity that has never existed before and should never exist in a free and open community.

Lack of need. The point is made by the opponents to federal aid that there exists at the present time no need for massive federal aid to education. The need, rather, is to tighten up the present curriculum, to eliminate the frills, and to use existing facilities more efficiently. Thus, through more effective utilization of our facilities we will receive more education for the same amount of money.

The point is also made that there is fiscal ability on the part of states to support good educational programs. The states have the potential for doing the job if they have the will. In fact, state governments are in a better position to finance education than is the federal government. If we want proof of this, all we have to do is look at the classrooms that have been built by the states, and look at the way teachers' salaries have improved. These illustrations should answer the question of whether the states have been doing the job or not. The American Farm Bureau, an active opponent of federal aid, states: "There is massive evidence to demonstrate that we are making real progress at the state and local levels in meeting the educational needs of our nation."[5]

Federal control. One of the strongest arguments used against federal aid to education has been that control will necessarily and inevitably follow any program of federal aid. This is seen as a disaster, for in truth, the last stronghold of states' rights is that of the school. Aid to education is seen as yet another wedge in the overpowering drive of the federal government to seize control of all endeavors and use this wedge to diminish and abolish individual rights.

In aid to education, the purpose is to improve schools. Whenever there is change, there is the possibility of federal control. Why would the federal government spend its money without demanding an educational accounting as well as a fiscal accounting? The National Defense Education Act, while supporting certain areas of the curriculum, particularly in mathematics, science, and foreign language, has in effect unbalanced the curriculum in other areas. This affects not only elementary and secondary levels, but also the college. Increased availability of funds has undoubtedly drawn more able students, effective faculty, and improved equipment toward the sciences. This is cited as an example of what happens when the federal government enters the field of education.

Unconstitutionality. As it has been pointed out, education is not mentioned in the Constitution. The 10th Amendment to the Constitution has had the effect of making education essentially a state responsibility, which might conceivably *prohibit* the federal government's involvement at all. Article X states, "The powers not delegated to the United States by the Constitution, nor prohibited by it to the states, are reserved to the states respectively, or to the people."

Senator Goldwater pointed out in a speech to Congress in 1961, that "No constitutional amendment to extend federal powers or responsibilities into education has ever been considered. If proposed, it would be overwhelmingly rejected."[6]

Cost. The opponents to federal aid to education are vehement in their position that the government, which is already funding war efforts past, present, and future, is in no position to fund our most expensive domestic cost, that of education. They point out that the federal income tax is already as high as it can possibly be and that the property tax, which represents only 13% of the national tax bill, if used more effectively and efficiently, could provide the necessary monies for education.

It is clear, too, that all sources of tax money are the same, that is, they all come from the individual citizen. There really are no tax monies available, therefore, to the federal government that are not also available to the states.

Individual Initiative. Any federal assistance will lessen the sense of local pride and responsibility the people feel for their schools. The federal government will come between the schools and the local community, which is one of the most detrimental things that could ever happen to education. In most areas of our lives we see tremendous increases in centralization, but the schools historically have been close to the people and the people have been close to the schools. This is the best way to insure freedom and equality of education for our children.

Most writers who are opponents to the involvement of the federal government make this point. They feel that the federal government's involvement will weaken the schools because the people will be less willing to make decisions about their schools. They feel that the schools, once out of the hands of the individuals, will get into the hands of the bureaucrats. The purpose of any aid to education should be to help people to help themselves. No aid should involve the taking away of this right through federal interference. It is felt that through federal involvement the responsibility for the local school will disappear.

Historical precedent. It has been pointed out that most education bills have been passed not to aid education or to improve education, but in effect, to aid the federal government. Some recent research has pointed out that the ordinances of 1785 and 1787, often times cited as the beginning of the federal government's involvement in education, were really passed to encourage the settlement of large parcels of land and to develop our country, rather than to aid education. It has been pointed out also that railroads were given much more land than was education.

In more recent times it has been pointed out that our international role, our concern with the space race, and military preparedness, led to the passage of the National Defense Education Act. Even the wording of this bill, it could be pointed out, with national defense coming before education, would indicate the primacy of the concern. The Impact Laws 815 and 874 are, in effect, payment in lieu of taxes and are not meant to aid education. It can be pointed out also that the Morrill Act was really meant to aid agriculture and that the School Lunch Act originally was set up to get rid of surplus food products. In spite of many enactments pertaining to education, the federal government has been basically involved in other issues—settling land, utilizing surplus food products, improving agriculture, and most recently, the space race.

Individual Freedom. One of the most frequent arguments used is that expanding the role of the federal government in education will be another way of losing our political and intellectual freedom. Individuals subscribing to this point of view hold that the family is the basic unit in American society. Although the family has delegated to local government some duties that it was unable to carry out, it has never seen fit to give to the federal government the power over the education of its children.

Some people have recently, with the passage of the Elementary and Secondary Education Act in 1965, become concerned also with this question. Many of them feel that the government has been too vehement in dictating how certain monies should be spent and in setting up regulations, checks, and requirements that must be fulfilled by local school districts before they can obtain the money to which they are entitled.

On the college and university level it can be pointed out that the concern for federal research monies has to some extent upset the delicate balance that previously existed between research and teaching and that this has made the situation of the college student even more intolerable than it was before. The student and the professor are thus directly influenced by bureaucratic decisions in Washington. The college professor's skill is to some extent judged by his facility in obtaining research grants rather than in his skill as a college teacher. Students, too, are influenced in their choice of a profession or in their field of further study by the availability or non-availability of government funds.

Arguments in Favor of Federal Aid to Education

A variety of arguments have been presented by individuals and groups that favor a greater role for the federal government in education. In this section are outlined nine of the major arguments made by these individuals and groups.

Local control. Local control represents the first and strongest argument for both the proponents and the opponents of federal aid. Historically our schools have developed as local institutions and there has consistently been great concern on the part of individuals connected with education that education remain a local concern.

This concern is shared, moreover, by the U.S. Office of Education and the great majority of those in both houses of the Congress. There are few individuals, it is argued, who believe that local control of education will be lost if federal aid is received. Since no one really likes or desires federal control of education, there appears to be little reason to fear that this will be an outcome of any federal legislation to aid educational efforts. Experience with federal grants to districts has demonstrated, furthermore, that it is possible to draw up legislation and to administer this legislation without inhibiting local control.

Equalization of Educational Opportunity. Individuals who favor federal aid to education take the position that we must equalize educational opportunity throughout our country, for at the present time, there are sections of our country where youngsters are not receiving an equal opportunity in the field of education. It is stated, furthermore, that it is impossible for some states, due to the large number of children and the lack of wealth, to provide this education. It is only through the efforts of the federal government, therefore, that all youngsters may receive a fair distribution. In the year 1968-69, for example, New York state spent approximately $1,159 per child on education while the state of Mississippi spent only $466 per child.[7]

Failure to provide superior education is not due to the lack of willingness on the part of states, it is pointed out, but rather a lack of fiscal ability. The personal income per child index shows that in 1968 Mississippi had approximately $7,195 behind each child of school age, whereas the state of New York had approximately $17,233. This discrepancy is even further complicated by the fact that the number of school-age children per hundred adults, 21-64 years of age, was 63 in Mississippi, while at the same time, the number of school-age children was only 46 per 100 adults in New York.[8]

National Concern. Another argument favoring greater federal involvement in education is that our nation's welfare is directly affected by what happens in education. This attitude is illustrated most effectively by the national response to Sputnik in 1957, which resulted almost immediately in passage of the National Defense Education Act in 1958, with its concern for subjects vital to national welfare; e.g., mathematics, science, and foreign language. A host of subsequent bills illustrate the national concern for the disadvantaged, for the War on Poverty which led to the Elementary and Secondary Education Act in 1965, which focused on compensatory education for economically deprived students.

Stemming from this position is the argument that our nation as a whole is directly affected by whatever happens in any sector of society. Deficiencies in any sector, for example, education, present a problem for all of society. The many failures in the draft test is only one instance of an educational deficiency that affects national welfare and has caused concern regarding the efficacy of education. For this reason, education is seen as more than a local responsibility and a state function. It is recognized as a national concern.

Need. The need for an improved educational system is one of the strongest arguments made by the proponents of increased federal aid. Not only is need stated in terms of housing the existing group of students and improving teachers' salaries, but stress is also placed on the need to provide a generally improved educational system for all youngsters. Since 1957, and Sputnik, our educational system has seen a greater and greater concern for excellence as we develop curricular innovation, new materials, and better trained teachers to improve our educational system across the board.

It is felt that the only way to insure this improvement in education and the only way to assure that it is carried out in all fifty states is for the federal government to be an innovative agent. The federal government has become involved, therefore, in improving teacher education, supervision, curriculum, and materials of instruction. Proponents of federal involvement in education are not looking for mere improvement of minimum

54

standards in some locales, but are aiming at raising the level of the total educational program.

The Tax Base. According to persons advocating federal participation in education, only the federal government has a tax base sufficiently broad to pay for a broad program of education. It is pointed out, for example, that the federal government collects approximately 2/3 of the taxes in this country, yet it pays only a little over 6% of the cost of education.

It is noted, furthermore, that money for education comes primarily from the local property tax, a very inflexible, regressive type of tax. Property is no longer considered the index of wealth that it was when this country was chiefly rural. A truer index, it is maintained, is that of income, which is tapped effectively and efficiently by the national government. Approximately 90% of taxes on personal and corporate income are paid to the national government.

Mobility of the People. Closely related to the national concern for education is the fact that we are one of the most mobile people ever to exist on this earth. It is estimated that each year 40 million people change their addresses and approximately 1 million youngsters cross state lines. Each month, for example, California receives enough new people to create a town of 30,000. We have both mass migration from the south to the north, as well as movement from smaller communities to the megalopolis.[9]

Thus, it can be seen that the individual child, who through no fault of his own, receives a poor education, is hampered. In moving to another state, he also penalizes that state for something with which it had nothing to do. From these observations it can be quickly reasoned that, since mobility is a fact in our society, place of residence should not be allowed to have the deleterious effect that it might on a person's future. It is the rare individual who is born, reared, educated, works, lives, and retires in the same community. Furthermore, most of the people do not spend their entire lives even in one state. Our national mobility, therefore, indicates the need for a strong minimum education program in every state.

Acceptance. From all information available, it appears that the majority of people in our society are in favor of federal aid to education. In 1960 Gallup found that approximately 65% of the American voters favored federal aid to school construction. The Lou Harris Poll in 1963 found that 70% of the voters favored federal aid to education.[10] As might be expected, a high percentage of teachers favored federal aid. *Phi Delta Kappan* reported that 85% of its membership list favored federal aid to education. The Los Angeles Teachers' Association found that 80% of its teachers were in favor.[11]

Efficiency of the Federal Government. Earlier the point was made that the federal government not only collects a high percentage of the taxes in this country, but that it also collects them very efficiently, by and large, more efficiently than do state and local agencies. The federal government is efficient not only in collection of funds, moreover, but in the dispersing of these same funds. The "freight bill" that is sometimes attributed to monies going to the federal government and returning to the local district, furthermore, has not proved to be large. For instance, one of the Hoover commissions found that administrative overhead for the school lunch program was only 1.7% of the total cost and for such school legislation as Public Law 874 and Public Law 815, the overhead was under .9%, very economical rates for administrative costs.[12]

History. Historically, there is nothing new or unusual about federal involvement in education. In 1785, Congress began passing federal laws involving education and has since that time passed approximately 200 laws. Edith Green, Representative from Oregon, stated that the issue of federal involvement in education was decided over 100 years ago and that presently we have at least 42 federal agencies providing aid to education in the amount of over two billion dollars a year.[13] We have had federal aid and help for education since 1785, and it appears that we are no closer to federal control of our schools now than we were in the 18th century.

The Constitution. Many writers have pointed out that the constitution of the United States does not mention education in its main body or in any of the amendments. Opponents to federal aid to education point out that this omission indicates a clear lack of interest in education on the part of the federal government. This omission has not in any way, however, hindered the government's involvement when involvement was deemed desirable or necessary.

The General Welfare Clause of the Constitution, Article I Section 8, is used by many people as a justification for the federal government's involvement in education. The clause reads, "The

Congress shall have power: To lay and collect taxes, duties, imposts, and excises, to pay the debts and provide for the common defense and general welfare of the United States. . . ." Education was certainly in the minds of the founding fathers, for Washington's farewell address states, "Promote then as an object of prime importance institutions for the general diffusion of knowledge."

FOOTNOTES

1. *Phi Delta Kappan*, Volume XLV, No. 3 (December, 1964): p. 207.
2. Edith Green, "Education: Our Largest Enterprise," *College Management*, (March, 1970): pp. 4-5.
3. Sidney W. Tiedt, *The Role of the Federal Government in Education.* Fair Lawn, New Jersey: Oxford University Press, 1966, p. 30.
4. *Op. cit.*, p. 30.
5. United States Senate Committee on Labor and Public Welfare, *Proposed Federal Aid for Education: A Collection of Pro and Con Excerpts and a Bibliography.* Washington, D. C.: U. S. Government Printing Office, 1961.
6. Barry Goldwater, "Historic and Current Federal Role in Education," *Congressional Record*: Speech, September 23, 1961.
7. Research Discussion-National Education Association, *Estimates of School Statistics, 1969-70.* Washington, D. C.: The Association.
8. Research Discussion-National Education Association, *Rankings of the States*, Washington, D. C.: The Association, 1970.
9. National Education Association, *Research Bulletin*, Washington, D. C.: The Association, 36:4, pp. 99-100.
10. *Christian Science Monitor.* Lou Harris Poll (September 13, 1963).
11. Tiedt, *Ibid.*, p. 37.
12. United States Department of Health, Education and Welfare, Office of Education, *Digest of Educational Statistics.* Washington, D. C.: U. S. Government Printing Office, 1964.
13. United States House of Representatives Committee on Education and Labor, *The Federal Government and Education.* Washington, D. C.: U. S. Government Printing Office, 1963.

SELECTED BIBLIOGRAPHY

Allen, Hollis P. *The Federal Government and Education.* New York: McGraw-Hill, 1950.

American Association of School Administrators. *The Federal Government and Public Schools.* Washington, D. C.: The Association, 1965.

American Council on Education. *Source Book on Federal-State Relations in Education.* Washington, D. C.: The Council, 1945.

Bendiner, Robert. *Obstacle Course on Capital Hill.* New York: McGraw-Hill, 1964.

Benson, Charles S. *The Economics of Public Education.* Boston: Houghton Mifflin, 1961.

Buehler, Ezra C. *Federal Aid for Education.* New York: Noble, 1934.

Burke, Arvid J. *Financing Public Schools in the United States.* Rev. ed. New York: Harper & Row, 1957.

Conant, James B. *Shaping Educational Policy.* New York: McGraw-Hill, 1964.

Educational Policies Commission. *Educational Responsibilities of the Federal Government.* Washington, D. C.: National Education Association, 1964.

Edwards, Newton. *The Courts and the Public Schools.* 2nd ed. Chicago: University of Chicago Press, 1955.

Harris, Seymour E. *How Shall We Pay for Education?* New York: Harper, 1948.

Johns, Roe L. and Edgar L. Morphet, *The Economics and Financing of Education,* Englewood Cliffs, N. J.: Prentice Hall, Inc., 1969.

Kursh, Harry. *The United States Office of Education; a Century of Service.* New York: Chilton, 1965.

Kurth, Edwin L. *Federal Aid to Education.* Gainesville, Florida: The Florida Educational Research and Development Council, 1968.

Labovitz, I. M. *Aid for Federally Affected Schools.* Syracuse, New York: Syracuse University Press, 1963.

La Noue, George R. *Public Funds for Parochial Schools?* New York: National Council of the Churches of Christ in the U.S.A., 1963.

Lee, Gordon C. *The Struggle for Federal Aid.* New York: Teacher's College, Columbia University Bureau of Publications, 1949.

Morphet, Edgar L., Roe L. Johns, and Theodore L. Reller. *Educational Organization and Administration: Concepts, Practices, and Issues.* 2nd ed. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1967.

Mort, Paul R. *Federal Support for Public Education.* New York: Teachers College, Columbia University Bureau of Publications, 1936.

Munger, Frank J. and Richard F. Fenno, Jr. *National Politics and Federal Aid to Education.* Syracuse, New York: Syracuse University Press, 1962.

Pierce, Truman M. *Federal, State and Local Government in Education.* New York: The Center for Applied Research in Education, Inc., 1965.

Quattlebaum, Charles A. *Federal Aid to Elementary Education.* Chicago: Public Administration Service, 1948.

Quattlebaum, Charles A. *Federal Educational Policies, Programs and Proposals,* Parts I, II, and III. Washington, D. C.: Government Printing Office, 1960.

Sly, John F. and others. *Financing Education in the Public Schools.* Princeton, New Jersey: Tax Institute Incorporated, 1956.

Spurlock, Clark. *Education and the Supreme Court.* Urbana, Illinois: University of Illinois Press, 1955.

Tiedt, Sidney W. *The Role of the Federal Government in Education.* New York: Oxford University Press, 1955.

United States House of Representatives Committee on Education and Labor. *The Federal Government and Education.* Washington, D. C.: U. S. Government Printing Office, 1961.

Wise, Arthur E. *Rich Schools, Poor Schools.* Chicago: University of Chicago Press, 1968.

CHAPTER 8

Financial Equalization Among the States from Federal Aid Programs

EDGAR H. BEDENBAUGH
AND
KERN ALEXANDER

With increasing frequency during the last two decades, education has been acknowledged as a principal means of contributing to the economic welfare of Americans. Also, numerous instances can be cited when social, political, scientific and technological events have brought about a critical examination of the ability of the public schools to cope with a wide assortment of pressing problems confronting the nation.

Technological changes as well as other kinds of importantly related societal changes have presented unavoidable challenges to social institutions in the United States. Public education has not escaped these challenges. Their full scope and depth, according to Grant Venn, "may not be comprehended for years to come," but their "dimensions are now clear enough to call for a massive response on the part of American education. All levels of education . . . must move quickly to assume greater responsibilities for preparing men and women for entry into the changed and changing world. . . ."[1]

Efforts to respond in the manner called for above have demanded increasingly greater expenditures for support of educational programs. Financing of public education by the federal government has increased insignificantly and is playing an ever increasing role in meeting the educational needs of the nation.

FEDERAL INVOLVEMENT IN FINANCING EDUCATION

The establishment and support of public schools continues to be a primary responsibility of the individual states. Nevertheless, to assert that the federal government has allowed itself to be relegated to an inconsequential role in financing the education of American school children does not represent an accurate assessment of the facts.

The earliest efforts of the federal government to assist the states in meeting their educational obligations were in the form of land grants. Subsequent assistance has been largely through monetary aid, most of which has come through four major thrusts. The first of these, the Smith-Hughes Act of 1917, was for vocational education purposes. Between 1917 and the present time, aid for vocational education has been increased and extended through a series of legislative acts and amendments. The second substantial infusion of federal monies was provided through Public Law 81-815 and 81-874, enacted in 1950, which authorized funds for assistance in construction and operation of schools in districts "impacted" by federal activities. The third and fourth large programs of federal assistance to elementary and secondary education were authorized by the National Defense Education Act of 1958 (NDEA) and the Elementary and Secondary Education Act of 1965 (ESEA).[2]

ISSUES AND PROBLEMS CONCERNING FEDERAL PROGRAMS

There are many issues involved in the enactment of legislation for federal aid to education. Among the issues have been those which represent basic differences in political philosophies between proponents and opponents of federal aid. In addition, there have been conflicts about race and religion—as well as disputes over the form or kind of financial assistance which should be provided. According to Munger and Fenno, "The struggle over federal aid has not been a single conflict, but rather a multiplicity of controversies only loosely related to one another."[3]

The significant influence of various issues on congressional attempts to enact legislation to aid education was effectively summarized as early as 1948 by Senator Lister Hill of Alabama. In the 1948 floor debate over federal aid, he told the Senate:

> "Mr. President, bills similar to this one have been before the Senate for many years. Volumes of hearings have been taken. If we were to bring into the chamber from the Committee on Labor and Public Welfare the many volumes of hearings, they would be piled high on our desks. Year after year, the committee has held hearings. Year after year, the committee has spent weeks considering the bill, attempting to reconcile our differences, attempting to wipe out inequities, attempting to bring forth the best possible bill to provide federal aid. . . ."[4]

In the 22 years that has passed since Senator Hill made the preceding remarks to his colleagues in the Senate, proposals for federal aid have continued to evoke at least as much controversy and debate as he described.

Federal Role in Equalization

The relevancy of *equalization* of federal funds for education is beyond question and will remain so as long as states have different fiscal abilities and individuals have varying educational needs. The definition of equalization and the extent to which funds should equalize are elements in all federal education legislation. This chapter is devoted to discussing the concept of equalization as it applies to the several states and the measurement of equalizing tendencies of selected current federal school aid programs.

Federal equalization has been defined in a number of ways. To illustrate, equalization has been defined simply as an allocation of a uniform amount for each state; to others it means an equal appropriation of funds per unit of need—such as per person. In their discussion of the equalization method, Johns and Morphet have described it as involving the computation of the cost of a defined program, calculation of the amount of funds that can be provided by "prescribed uniform local effort, and payment by the central government of the part of the program that cannot be met from prescribed local effort."[6]

Equalization also may be described as grants which are designed and allocated according to the educational level of individual states in comparison to a national standard. To effectively implement an equalization program based on this concept obviously would necessitate first deriving, then analyzing, desirable educational outputs. In turn, relatively larger grants would be supplied to states with education systems judged to have greater deficiencies.

Although it is true that equalization may be conceptualized in various ways, including some to which no attention was given above, a frequently-made assumption is that additional funds in support of poorly financed schools can raise the quality of their educational output. Stated another way, greater amounts of funds for schools in low ability states can increase educational opportunities for children. If this assumption is accepted, the following statement seems to provide an acceptable definition of equalization for the purposes of this study.[7]

> "Equalization is a provision in a grant program, either in the allocation or matching, or both, which gives some statutory recognition to underlying differences in the states' relative capacities to raise funds from their own resources for financing a joint federal-state program, in order to achieve more uniform standards throughout the nation."[8]

Based on this definition of equalization, federal program allocations and relative ability (financial capacities of states) become variables of great importance.

A substantial amount of research already has been concerned with the distribution of federal expenditures by states. Some of this research is summarized in the following section.

Studies Related to Federal Programs

The Advisory Commission on Intergovernmental Relations, in a study which compared 1961 state per capita incomes with fiscal 1962 distributions of $7 billion in federal grants, concluded that there does seem to be an inverse relation between per capita income and the distribution of all federal grants, "although not a significant one." The correlation coefficient was −.041. The Commission report states that federal grant programs which use an index of state fiscal capacity as a factor in the distribution of funds base this index on relative per capita income.[9]

The Commission suggests further that the relation between grants and resources may be viewed from another perspective. That is, the total federal grant package requires poorer states to contribute a larger share of their resources than the wealthier states to matching their federal allocations. The grants were reported, however, as contributing to a greater uniformity of tax effort than would result without them. Also, if the grants were not provided, tax effort of the states with lower ability would be required to increase in most states by as much as 30 to 40 percent. On the other hand, tax effort in higher ability states would need to increase by only 15 to 20 percent. The tax effort of the poorer states "has been substantially above the tax effort of the wealthier jurisdictions. . . . In short, the weight of explicit equalization factors is not large."[10]

Maw Lin Lee presented a recent study which explored factors associated with the allocations of various categories of federal funds by states and examined the relation of the level of those expenditures to the level of income in each state. In his presentation, he reviewed several other important studies. These are summarized below.

> . . . Selma Mushkin applied the concepts of benefits and incidence to estimate the distribution of federal expenditures among regions and states. With the cash budget of 1952, she found that the spread of per capita federal expenditures among states is narrower by use of a benefit measure than that which is obtained through an incidence measure. . . . Mushkin also found that, although per capita incidence tends to be higher in the wealthier states than in the poorer states, federal programs are relatively more important in the income flow of poorer states. Furthermore, poorer states receive the largest dollar excess of federal expenditures or benefits over revenues paid.
>
> In contrast with Mushkin's study, Howard Schaller . . . analyzed the effect of federal grants-in-aid on the disparity in state per capita income using 1929, 1939 and 1949 data. He found a tendency for grants-in-aid programs to reduce disparity. He noted, however, the impact appears to be slight because the amount involved in these programs constitutes only a small fraction of gross national product.
>
> In his 1962 paper, I. M. Labovitz . . . reported his estimate of the incidence of taxation by state of origin and the allocation of expenditures by state of recipient or activity. His study is based on the average of 1958, 1959 and 1960 expenditures. In their recent study, T. F. Pogue and L. G. Sgontz . . . investigate the effects of grants-in-aid on state and local spending. Their study covers the period 1958-1964.[11]

Professor Lee reported that results of his study indicated an inverse relation between net expenditures and incomes. That is, "low income states receive a larger amount of net federal expenditures while high income states receive a smaller amount. The negative relationship is consistent with Mushkin's result described earlier."[12]

A study by Anderson in 1967 analyzed and evaluated the extent to which Title I of the Elementary and Secondary Education Act provided financial assistance to low-income areas in the United States. The study was further concerned with investigating recommendations for the distribution of federal financial aid to education and suggesting a revision of the Title I distribution plan.

Anderson examined the financial relation between Title I funds and (1) a measure of financial ability of states based on personal income per child of school age, and (2) a measure of local school district financial ability in Indiana utilizing adjusted assessed valuation per pupil in average daily attendance. The distribution of funds did not inversely correspond to per pupil assessed valuations of the local school districts studied. Evidence found in Anderson's study did indicate that the ESEA Title I distribution plan functioned effectively to equalize at the state and regional levels.[13]

ISSUES AND PROBLEMS EXAMINED

In his discussion of contemporary trends and issues in school finance, Alexander suggested that distribution procedures and expenditure restrictions are of primary importance in studying federal categorical aid programs.[14] He stated further that the procedures for allocating funds among the states are subject to substantial controversy, with individual states tending to advocate methods of allocation which seem to meet their individual needs best. Although there are variables and factors which may produce more benefits for one state than for another, "it is generally conceded that factors that equalize educational opportunity among the states should be included." As in this study, Alexander discussed equalization in terms of statutory recognition of differences in the relative abilities of the states to support adequate educational programs.

Issues and Related Questions Defined

Primary attention in this study is given to federal programs providing financial aid to public elementary and secondary education (grades K-12). The basic purpose of the study was to determine the extent to which the allocations of funds from ten selected federal aid programs provide for equalization in relation to the relative financial ability of the fifty states to support public education.

As a means of giving additional clarification to the emphasis and purpose of the study, the following questions were posed:

1. In terms of the provisions in the legislation authorizing the ten programs, including the procedures for allocating funds, what is the intent of these programs? How do these provisions contribute to the tendencies of the program allocations to equalize or disequalize in relation to financial ability?
2. Concerning each of the ten programs, to what extent is there either an equalizing or a disequalizing relation between the allocation of funds and the relative financial abilities of the states?
3. Concerning all ten programs combined, to what extent is there either an equalizing or a disequalizing relation between the allocation of funds and the relative financial ability of the states?

Selection of Specific Variables

Effort was made in selecting the ten programs to choose those generally considered as being of major importance to public education. The primary reason for their selection, however, was that at the time of the study these programs provided greater amounts of funds to the states than were being provided through other federal assistance to education. When combined, they comprised in excess of 80 percent of the total funds administered by the United States Office of Education for elementary and secondary education. Programs selected were those authorized by: (1) Public Law 81-874; (2) Public Law 81-815; (3) Title III, National Defense Education Act (NDEA); (4) Title V-A, NDEA; (5) Basic grants of the Vocational Education Act; (6) Title I, Elementary and Secondary Education Act (ESEA); (7) Title II, ESEA; (8) Title III, ESEA; (9) Title V, ESEA; (10) Title VI-A, ESEA.

Analysis of these programs was concerned only with the fifty states. That is, it was not concerned specifically or directly with governmental or administrative units within states—such as counties, municipalities, or school districts. Also, it was not concerned with the District of Columbia or the outlying territories.

A number of possible indicators of state relative financial ability were considered for use, but personal income of the states seemed to represent the best and most convenient measure to use for this study. Most authorities in educational finance consider gross national product, national income, and personal income as being the most useful and reliable measures of wealth for studying state financial ability to support education. Personal income, however, is the only one of the three that is regularly available for individual states.[15] Thus, the use of an indicator of financial ability per child of school age was limited to this measure.

PROCEDURES USED IN THE STUDY

Because the study involved all of the fifty states, no sampling technique was used. As noted above, ten federal aid programs were selected because they were considered to be the most important of recent attempts by the federal government to provide financial assistance to elementary and secondary education.

Data Collection

Two distinctly different kinds of data were collected. The first kind was information concerning the legislative rationale, intent, and provisions of each program. Of special significance here are the procedures and/or formulas for distributing program funds.

In order to perform the statistical manipulations described later, the second kind of data collected included for each state, (1) the total amount of the allocation for each program for fiscal year 1968-69; (2) the estimated number of school age children (age 5-17) as of July 1, 1968; (3) the number of students enrolled in public schools in the fall of 1968; and (4) the estimated personal income in the first quarter of 1969. Program allocations data were obtained directly from personnel in the United States Office of Education.

Study Design and Analysis

The study was designed to compare funds allocated from the programs to relative financial ability. Comparisons were made on the basis of amounts of funds allocated per child of school age and per student enrolled in public elementary and secondary schools. As explained earlier, personal income per child of school age served as the measure of relative ability.

For each of the two ways of examining allocations, per child of school age and per student enrolled in public schools, eleven comparisons were made. Ten of these compared allocations from a specific program to relative ability. The eleventh comparison was between the combined programs' allocation and ability. In short, a total of 22 comparisons of this kind were made.

Rank-order and product-moment methods were used in correlating allocations and ability data. Thus, coefficients of correlation were obtained which indicate the extent of the inverse or positive relation between these variables. A perfect inverse relation (−1.00) would represent a perfect equalizing relation between the variables; no relation (0.00) would represent no equalizing or disequalizing relation; and a perfect positive relation (1.00) would represent a perfect disequalizing relation.

A t-test was used to compare allocations per child of school age with allocations per student enrolled in public schools. For example, the mean of P. L. 81-874 allocations per child (5-17) was compared with the mean of the same program's allocations per student enrolled in public schools. Since a t-test is essentially a procedure for "analysis of variance," the results provide some indication of whether there is a significant difference between the two allocation variables.

To assist further in comparing allocations with ability, as well as comparing allocations per child with allocations per student, actual dollar amounts associated with the allocations and ability variables were converted to standard values. These standard values represent the extent of deviation from the means of specific variables.

A summary of basic information necessary for assessing and understanding the ten programs is presented in this section. Specific attention is given to the findings obtained from performing the previously described comparisons, the equalization tendencies of the programs, and effects of allocation procedures on equalization tendencies.

Categories and Codes of the Variables

The allocation and relative ability variables studied were categorized and coded through an assignment of symbols as indicated below. The measure of wealth is coded as follows:

Y--Personal income of states per child of school age

The allocations per child of school age from the ten federal programs are coded as follows:

A—P.L. 81-874 allocations per child of school age
B—P.L. 81-815
C—NDEA Title III
D—NDEA Title V-A
E—Vocational Education Act basic grants
F—ESEA Title I
G—ESEA Title II
H—ESEA Title III
I—ESEA Title V
J—ESEA Title VI-A
K—Combined program allocations

The allocations per child enrolled in public schools from the ten federal programs are coded as follows:

L—P.L. 81-874 allocations per student enrolled in public elementary and secondary schools.
M—P.L. 81-815
N—NDEA Title III
O—NDEA Title V-A
P—Vocational Education Act basic grants
Q—ESEA Title I
R—ESEA Title II
S—ESEA Title III
T—ESEA Title V
U—ESEA Title VI-A
V—Combined program allocations

ANALYSIS OF CORRELATIONS

Table 8-1 shows the high and low allocation per child of school age of each of the ten federal appropriations being analyzed, the range, the mean allocation and the correlations between a measure of relative ability and the allocation per child

TABLE 8-1

ALLOCATIONS PER CHILD OF SCHOOL AGE, RANGE, MEAN AND COEFFICIENTS OF CORRELATION WITH RELATIVE ABILITY (Y)

Variable	*Low State Allocation Per Child of School Age*	*High State Allocation Per Child*	*Range*	*Mean of State Allocations*	*Spearman Rank Order Coefficient of Correlation*	*Pearson Product Moment Coefficient of Correlation*
(Col. 1)	*(Col. 2)*	*(Col. 3)*	*(Col. 4)*	*(Col. 5)*	*(Col. 6)*	*(Col. 7)*
A	$0.90	$148.66	$147.76	$ 14.88	−.035	.016
B	0.00	10.21	10.21	1.22	−.117	−.032
C	0.99	1.99	1.00	1.56	−.954**	−.924**
D	0.31	0.67	0.36	0.34	−.296	.006
E	3.52	6.87	3.35	5.14	−.768**	−.772**
F	8.65	54.85	46.20	21.16	−.617**	−.632**
G	0.74	0.99	0.25	0.92	.486**	.415**
H	2.77	6.44	3.67	3.52	−.202	−.069
I	0.33	2.77	2.44	0.88	−.328*	−.127
J	0.47	1.11	0.64	0.59	−.388**	−.101
K	25.44	197.97	172.53	50.23	−.565**	−.285*

*Denotes significance at .05 level.
**Denotes significance at .01 level.

of school age. Of particular interest are the correlations presented in columns 6 and 7 of this table. The Spearman rank order correlation is listed in column 6 and the Pearson product moment correlation in column 7. The level of significance of each correlation is also indicated. A .05 level of significance means that the conclusions that a correlation exists, can be considered 95 percent accurate and a level of significance of .01 means that the conclusions that a correlation exists can be considered 99 percent accurate.

Statisticians frequently compute both the Spearman and the Pearson coefficients because each coefficient gives some valuable information. A standard work on statistics should be consulted if one desires detailed information concerning the properties of each of these coefficients. Briefly the Spearman coefficient is useful for determining whether a relationship exists between two variables if the relationship between the two variables being studied is curvilinear, or if the cases are bunched around the mean with little variation. In such cases the Pearson correlation coefficient understates the relationship between the two variables. The Pearson correlation has the advantage of indicating "the power" of the relationship more accurately. The square of the Pearson coefficient indicates the percent of the variation in one variable that is associated with (explained by) the variation in another variable. For example, in Table 8-1 it is noted that variable C (NDEA Title III) has a Pearson correlation of −.924 with Y (personal income per child of school age). The correlation of −.924 squared equals .853746. This means that approximately 85 percent of the variation in the amount of federal funds allocated per child of school age from NDEA Title III is associated with variations in wealth per child of school age. Since the correlation is negative, the less the wealth (personal income) per child of school age, the greater the allocation per child of school age received by a state from this appropriation.

Let us now examine more closely the correlations presented in columns 6 and 7 of Table 8-1. It will be observed that in every case in which a significant Pearson coefficient exists there is also a significant Spearman coefficient. However, there are two variables, I and J, for which significant Spearman coefficients are reported but for which the Pearson coefficients are not significant. This is probably due to one or both of the conditions described above.

Table 8-1 indicates by one or both correlations that when the allocations from ten federal appropriations are expressed in amount per child of school age that five of these appropriations have an equalizing effect, one a disequalizing effect and four a neutral effect. When all ten appropriations are combined, the correlation shows an equalizing effect.

In Table 8-2, the allocations from each of the ten federal appropriations are expressed for each state in amounts per student enrolled in the public schools. A comparison of Table 8-2 with Table 8-1 shows that the correlations are very similar. Although the amounts of the correlations vary, the same variables (expressed differently) show significant Spearman correlations in both tables with the same signs with the exception of ESEA Title VI-A which has a significant negative correlation with the measure of wealth when expressed in allocation per child of school age but no correlation when expressed in allocation per child enrolled. The Pearson coefficients in both tables are significantly negative for NDEA Title III, vocational education basic grants and ESEA Title I. However, when the allocations per child enrolled from ESEA Title II and all ten appropriations are combined, Table 8-2 shows no significant Pearson correlation for these two variables.

ALLOCATION PROCEDURES AND EQUALIZATION EFFECTS

The following pages provide a state by state analysis of the equalization impact of the ten selected federal programs. Also, the combined effect of all the programs together is discussed and profiled.

Combined Programs Allocation

In fiscal year 1968-69, the combined total of the allocations to the states from the ten programs amounted to nearly $2.25 billion. Allocations to individual states ranged from $3.97 million for Vermont to about $217.8 million for California.

Equalization Effect of Combined Programs. Figure 1 shows the equalizing effect on each of the 50 states of all ten federal aid programs combined. The vertical axis lists the states in descending order according to wealth measured in terms of personal income per child of school age. According to this measure

TABLE 8-2

ALLOCATIONS PER STUDENT ENROLLED IN PUBLIC SCHOOLS, RANGE, MEAN, STANDARD DEVIATION AND COEFFICIENT OF CORRELATION WITH RELATIVE ABILITY (Y)

Variable	*Low State Allocation*	*High State Allocation*	*Range*	*Mean of State Allocations*	*Spearman Rank Order Coefficient of Correlation*	*Pearson Product Moment Coefficient of Correlation*
(Col. 1)	*(Col. 2)*	*(Col. 3)*	*(Col. 4)*	*(Col. 5)*	*(Col. 6)*	*(Col. 7)*
L	$ 1.01	$187.20	$186.19	$ 17.35	−.031	.020
M	0.00	12.82	12.82	1.42	−.036	.058
N	1.07	2.36	1.29	1.81	−.926**	−.934**
O	0.32	0.84	0.52	0.39	.156	.065
P	3.81	8.52	4.71	5.93	−.732**	−.729**
Q	8.77	63.54	54.77	24.46	−.594**	−.609**
R	0.93	1.21	0.28	1.06	.445**	.197
S	3.09	7.66	4.57	4.07	−.068	−.024
T	0.41	3.39	2.98	1.02	−.331*	−.120
U	0.52	1.39	0.87	0.67	−.124	−.042
V	37.95	249.29	211.34	58.20	−.581**	−.246

*Denotes significance at .05 level.
**Denotes significance at .01 level.

the wealthiest state is New York and the poorest is Mississippi. The horizontal axis shows the amounts allocated from the ten federal programs combined. These dollar amounts are converted to standard amounts to permit their being charted on a common

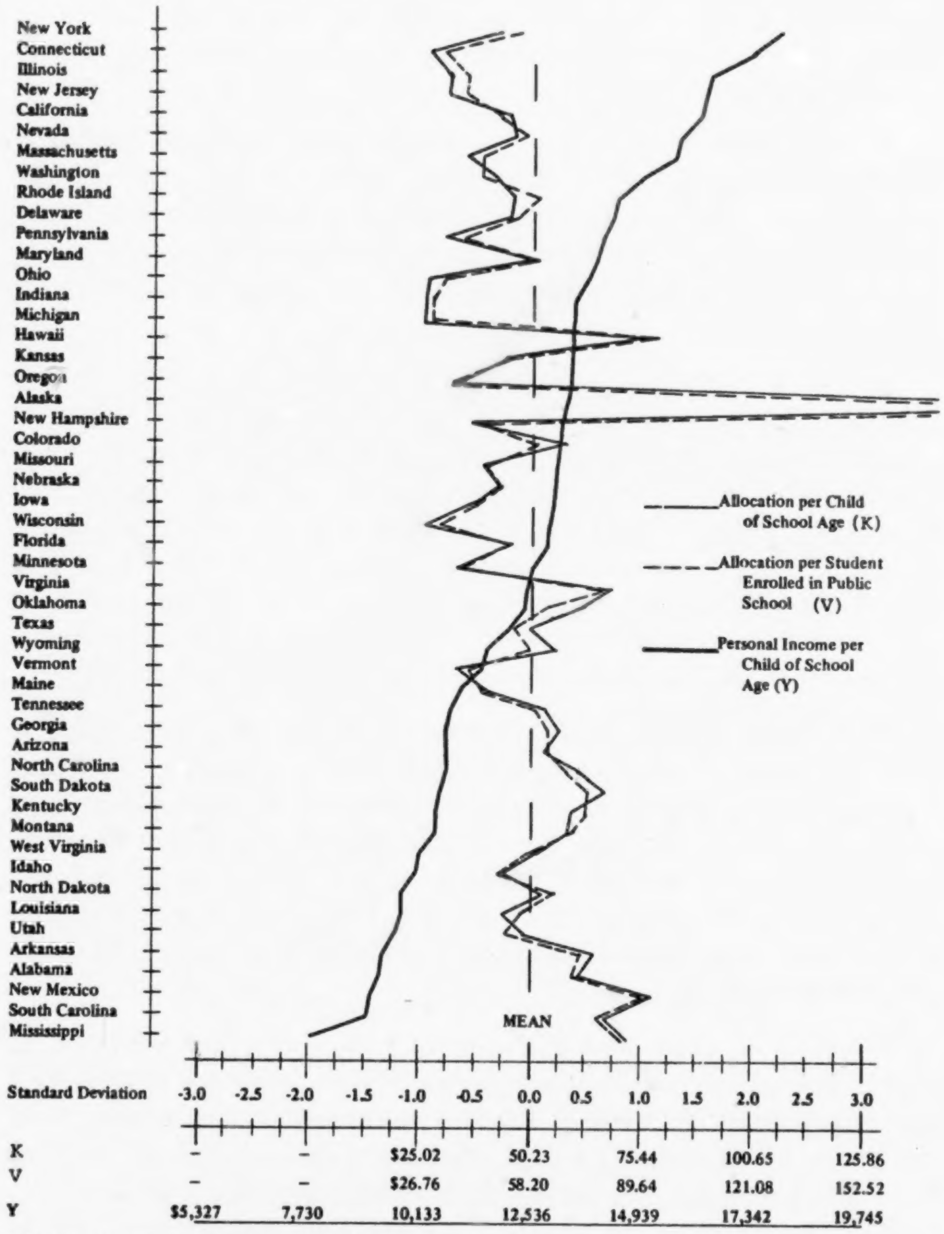


FIGURE 1. State-by-State Comparison of Combined Programs Allocations and Personal Income Per Child of School Age

scale. On the horizontal axis, one standard deviation below the mean for K, allocation per child of school age, amounts are \$25.02. A state which is one standard deviation above the mean in allocation per child of school age (K) is receiving \$75.44 under the ten federal programs combined. As indicated in the key, Y shows the personal income per child of school age. The standard deviation is a statistical measure which includes 2/3 of the cases within one standard deviation above and one standard deviation below the mean.

In analyzing this figure one should keep in mind that the nearer the lines K and V lines come to the Y line the less the equalization. The closer the entire figure resembles the letter *X* the greater the inverse relationship between allocation dollars and wealth. A high inverse correlation indicates high equalizing tendencies.

When all funds are combined and the inverse relation is determined between allocation per child of school age (K) and personal income per child of school age (Y), the resulting correlation is $-.285$ which is significant at the .05 level. This minimal significance means that the combined effect of all ten federal aid programs examined is a slight equalizing tendency. On comparing the allocation per student enrolled in public schools (V) to personal income per child of school age (Y) the correlation was found to be $-.246$ which is not significant at the .05 level.

The reader should note, however, that the coefficient derived from the Spearman rank-order method of correlation indicated a greater degree of inverse relation between the allocation variables and the Y variable than those derived from the Pearson product-moment method. In fact, if the product-moment coefficients had revealed as much inverse relation as those obtained from the rank-order method, there would be little reason to question their significance.

Looking at individual states in Figure 1, a slight tendency is found for the allocations to poorer states, such as Mississippi and South Carolina to drift toward one standard deviation above the mean, while wealthier states such as Connecticut and Illinois tend to fall nearer one standard deviation below the mean. Although the tendency is slight, a perceptible equalizing effect is clear.

Public Law 81-874

Originally enacted in 1950, Public Law 81-874 authorizes financial assistance for the maintenance and operation of schools in districts where enrollments are affected by federal activities. Funds are allocated to eligible districts through Section 3(a) to assist in providing education for children who live on federal property with a parent employed on federal property. Section 3(b) provides funds for children who either live on federal property or live with a parent employed on federal property, but not both. Districts having substantial increase in school enrollments resulting from federal contract activities with private companies are paid under the provisions of Section 4. In school districts where there has been a substantial loss of tax base resulting from the acquisition of real property by the federal government, financial assistance is authorized by Section 2. In addition, if no state or local education agency is legally able to provide public education to children who live on federal property, the United States Commissioner of Education is authorized under Section 6 to make arrangements for such education.

Equalization Effect of Allocation Procedure. The funds from this appropriation are distributed to local school districts on the basis of the number of enrolled students who meet the prescribed criteria for qualifying as pupils who "federally affect" or "impact" these districts. No attention is given in these procedures to the relative ability of districts or states in regard to *whether* they receive assistance from the program. Entitlements may vary, however, depending on student eligibility classifications and if it is more advantageous for a district to be paid on the basis of its local expenditures, average state expenditures, or average expenditures for the nation.

As a result, while relative ability does not have a significant relationship to program allocations, it is possible for districts of certain states to receive greater shares of funds even if they have relatively greater wealth.

Figure 2 shows that P.L. 81-874 does not equalize resources among the states. This subvention gives the poor state of Arkansas less funds than it provides the wealthy states of Massachusetts and Rhode Island. Maryland and Virginia are rewarded for their wealthy "impacted" school districts surrounding Washington, D. C., boosting their per child of school age and per student enrolled in public school allotments to the point that

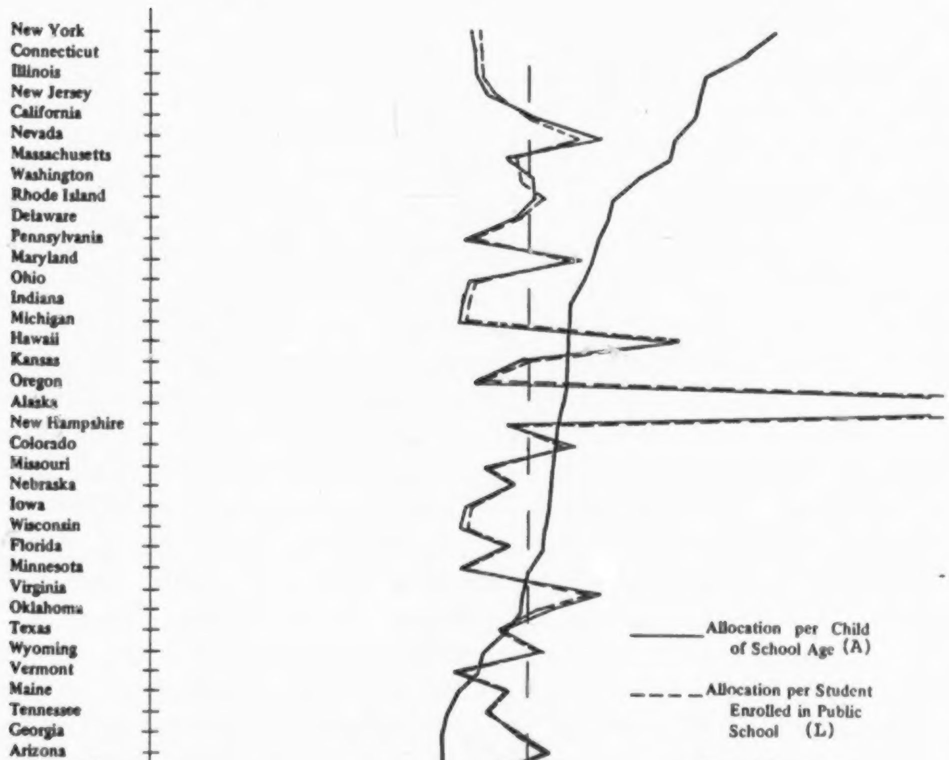


FIGURE 2. State-by-State Comparison of P. L. 81-874 Allocations and Personal Income Per Child of School Age

the program serves as a large subsidy for the more wealthy. Other similar situations exist causing other states to skew to the right of the mean. Overall, the P.L. 81-874 program provides a correlation of .016 when personal income per child of school age is compared to the allocation per child of school age (A) and a correlation of only .020 when the same income measure is correlated with the allocation per student enrolled in public schools (L).

Public Law 81-815

Public Law 81-815 authorizes payments to assist local school districts in the construction of school facilities in areas where enrollments are increased by federal activities. In brief, the program includes two sets of provisions through which federal assistance may be granted. Sections 5 and 9 authorize grants which are based on enrollment increases in federally connected areas. Section 9 grants, however, are limited to increases in enrollment of temporary duration. Section 14 authorizes grants based on the number of children who reside on Indian lands and for whom local school districts are unable to provide minimum school facilities.

Equalization Effect of Allocation Procedure. The distribution procedures provide that funds are allocated only in school districts where the number of federally connected children, as determined by prescribed criteria, is presenting a financial burden to the extent that minimum school facilities cannot be provided through utilization of all state and local funds available.

Obviously, this procedure includes neither a built-in minimum for all states nor a specific feature assuring greater shares of funds to poorer states. It is quite possible for some states (nine states in 1968-69) to receive no funds through the program. As a result, although there apparently is not a significant inverse or positive relation between allocations and relative ability, it is possible for certain states with relatively greater wealth to receive greater shares of funds. As examples, the greatest extremes in 1968-69 allocations were for the states of Hawaii, Alaska, and Colorado. All three of these states are well above the mean in personal income per child of school age.

Figure 3 shows the two allocation variables (B and M) of P.L. 81-815. The correlation of .032 between allocation per child of school age (B) and personal income per child of school age (Y) and the correlation of .058 between allocation per student enrolled in public school (M) and personal income per child

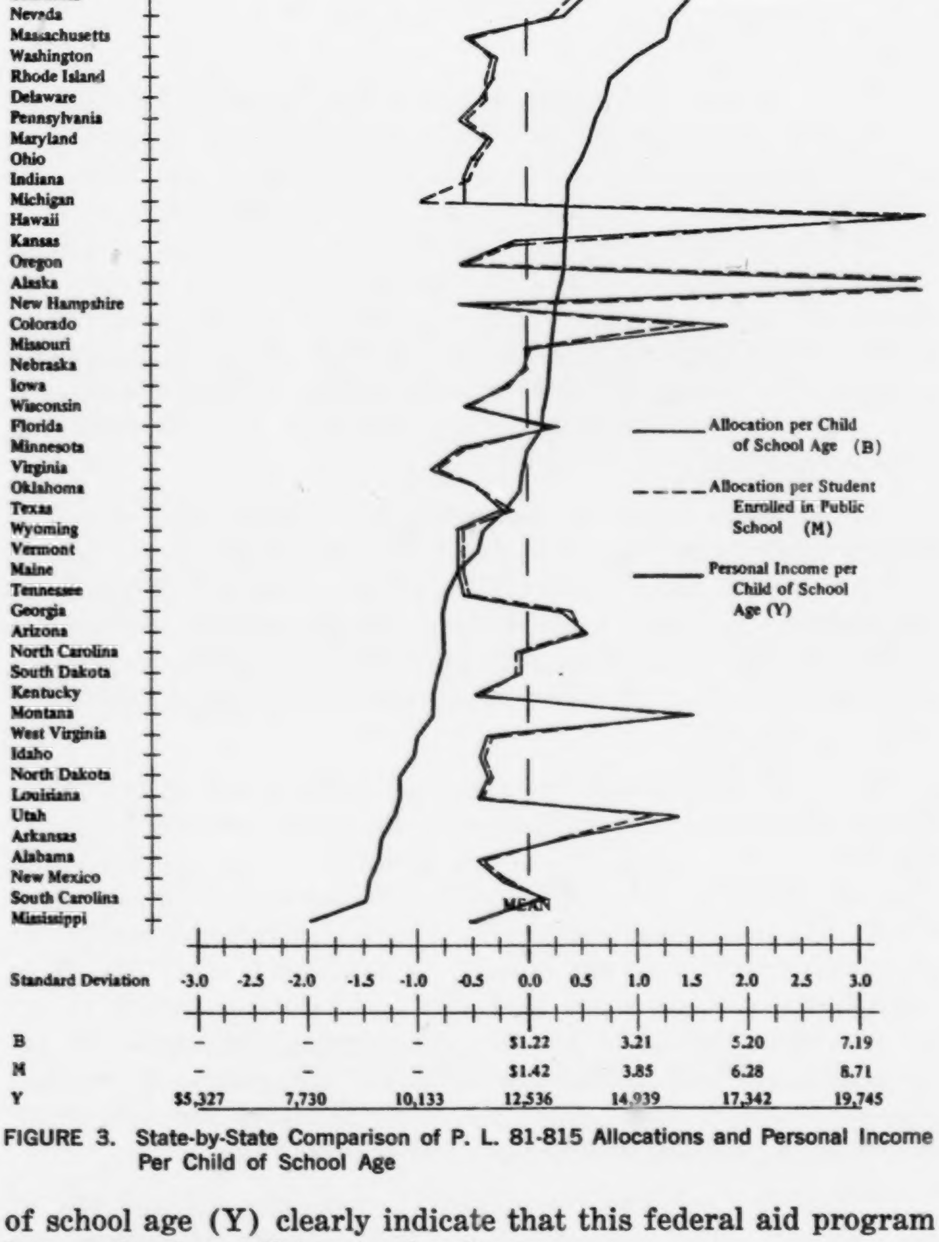


FIGURE 3. State-by-State Comparison of P. L. 81-815 Allocations and Personal Income Per Child of School Age

of school age (Y) clearly indicate that this federal aid program has no fiscal equalizing tendencies.

NDEA Title III

Through the 1958 enactment of P.L. 85-864, the National

Defense Education Act, the Congress responded to critics who charged public education with blame for the threat posed to the national defense by the comparatively small supply of scientists and lack of technological capability. Initially, Title III of NDEA was designed to provide financial assistance for strengthening instruction in science, mathematics, and modern foreign languages. Subsequent amendments have increased the number of curricular areas eligible for assistance.

In funding this required matching program, each state receives an allocation for program administration, including salaries and expenses of state Title III staff, on the basis of the state's proportion of the nation's school age population. All states, however, receive a minimum of $50,000 for these purposes. A separate formula is used to compute state allocations for eventual distribution to local education agencies in support of approved projects involving equipment, materials, and minor remodeling. Funds appropriated for such distribution are distributed among the states on the basis of their relative school age populations, weighted by their relative personal incomes. The weight which may be given to personal income, however, is limited to insure that no state will receive more than twice as much per child of school age as the state receiving the smallest amount per child. In effect, then, a larger school age population tends to increase a state's allocation while a greater per capita income tends to decrease it.

Equalization Effect of Allocation Procedure. The provisions in the allocation procedure specifying that funds are to be allocated to the states on the basis of their relative school age populations, weighted by their relative personal incomes is a very definite equalizing tendency for the program. This apparently is true even though the legislation also provides that no state will receive more than twice as much per child of school age as the state receiving the smallest amount per child of school age.

Yet an item of rather great importance is the fact that NDEA Title III requires dollar-for-dollar matching of allocated funds. Poorer states obviously have greater difficulty in matching federal dollars than the wealthier states. Thus, for some states at least, the extent of the equalizing relation nationwide could possibly be offset somewhat by the amount of state and/or local efforts required to match funds in order to receive assistance from this program. This can assume even greater impor-

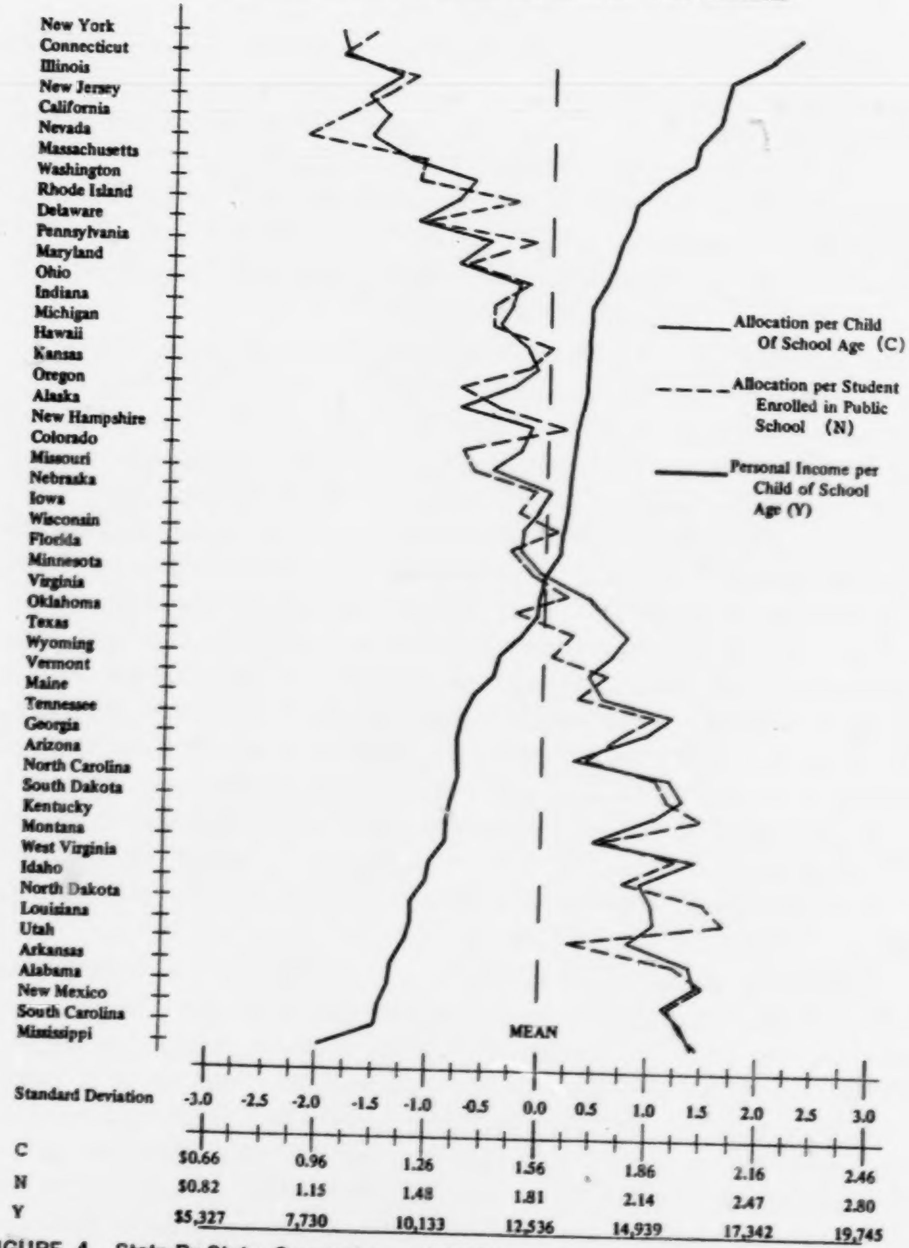


FIGURE 4. State-By-State Comparison of NDEA Title III Allocations and Personal Income Per Child of School Age

tance if some states are unable to provide the funds needed to match part or all of their allocations.

Figure 4 shows that Title III, NDEA currently has outstanding fiscal equalizing tendencies. The correlation between C and Y is −.924 and the correlation between N and Y is −.934.* The extent of the equalization of this program is dramatized by comparing the inverse relation between the C and N variables with personal income per child of school age (Y). While New York has a personal income per child (Y) scaled at +2.24 standard deviations, the allocation variables for New York (C and N) are scaled respectively at −1.90 and −1.66. Conversely, variable Y for Mississippi is scaled at −1.97 while the C and N variables are +1.98 and +1.45 standard deviations respectively. Translated into dollars and cents, this means that the allocation of Title III, NDEA funds per child of school age in New York was $0.99 while the much poorer state of Mississippi received $1.98. In terms of allocations per student enrolled in public schools (N), the amounts ranged from a high of $2.36 in Louisiana to a low of $1.07 in Nevada.

---

*Pearson Product Moment (See: Tables 8-1 and 8-2).

NDEA Title V-A

The legislative intent of NDEA Title V-A, as stated in Section 503(a), is to provide funds through an approved state plan for (1) a program of testing to identify students with outstanding aptitudes and ability; and (2) a program of guidance and counseling to advise students concerning courses of study, the vocation for which they should train, and ultimate admission to institutions of higher education. Funds appropriated for allocation among the states are distributed through a formula based on relative school age population. There is a provision for a minimum state allocation of $50,000. As is the case with NDEA Title III, the V-A program requires dollar-for-dollar matching at state and/or local levels.

Equalization Effect of Allocation Procedure. NDEA Title V-A legislative provisions include two key features: (1) funds are allocated on the basis of states' relative school age populations; and (2) each state is assured a minimum allocation of $50,000. The second feature apparently is responsible for the extreme deviations in the allocations of some states. That is, in a program this size ($17 million), the states with the smallest populations are assured of a relatively greater share of the funds. This is the case because their allocations would have been less than the minimum provided if they had been based solely on relative school age population. The minimum also may have either an equalizing or disequalizing effect, depending on the relative ability of the small state.

Another important result of the guaranteed minimum is that comparatively large states (poor or wealthy) may find the amount of their allocations reduced in order to provide the minimum guaranteed to all states. This kind of result also may have either an equalizing or disequalizing tendency for an individual state, depending on its relative ability.

It seems possible that funds allocated solely on the basis of relative school age population could show either equalizing or disequalizing tendencies because of relations existing between variables other than those studied. This may be true even though the procedure is not designed to specifically compensate or penalize states according to relative ability. Necessarily, the safest assumption seems that any greater extent of equalization which might have resulted from this feature of the procedure was offset by the provision for a $50,000 minimum.

As is the case with NDEA Title III, the Title V-A program is one which requires matching; therefore, the amount of financial effort required of the poorer states could result in a greater tendency of the program toward disequalization than is indicated by the effect of the appropriation on equalization shown in Tables 8-1 and 8-2.

Inspection of Figure 5 reveals that allocations of funds from Title V-A of NDEA bear little relation to the personal income variable. The means of the allocation variables were influenced substantially by the extreme deviations in the allocations to Alaska and Wyoming. Other than Nevada, these were the only states receiving more funds per child of school age (D) than the mean of the variables. The correlation between D and Y is .006 and the correlation between 0 and Y is .065 (Pearson), neither indicating any pattern of equalization.

Vocational Education Act Basic Grants

Vocational education legislation in recent years has been designed as a vehicle to extend and broaden opportunities for the preparation of all persons for gainful employment. The Vocational Education Act of 1963, followed by its 1968 amendments, emphasized a redirection of programs for employment preparation. That is, programs were redirected from preparation for specific occupations to any occupation not requiring a baccalaureate degree.

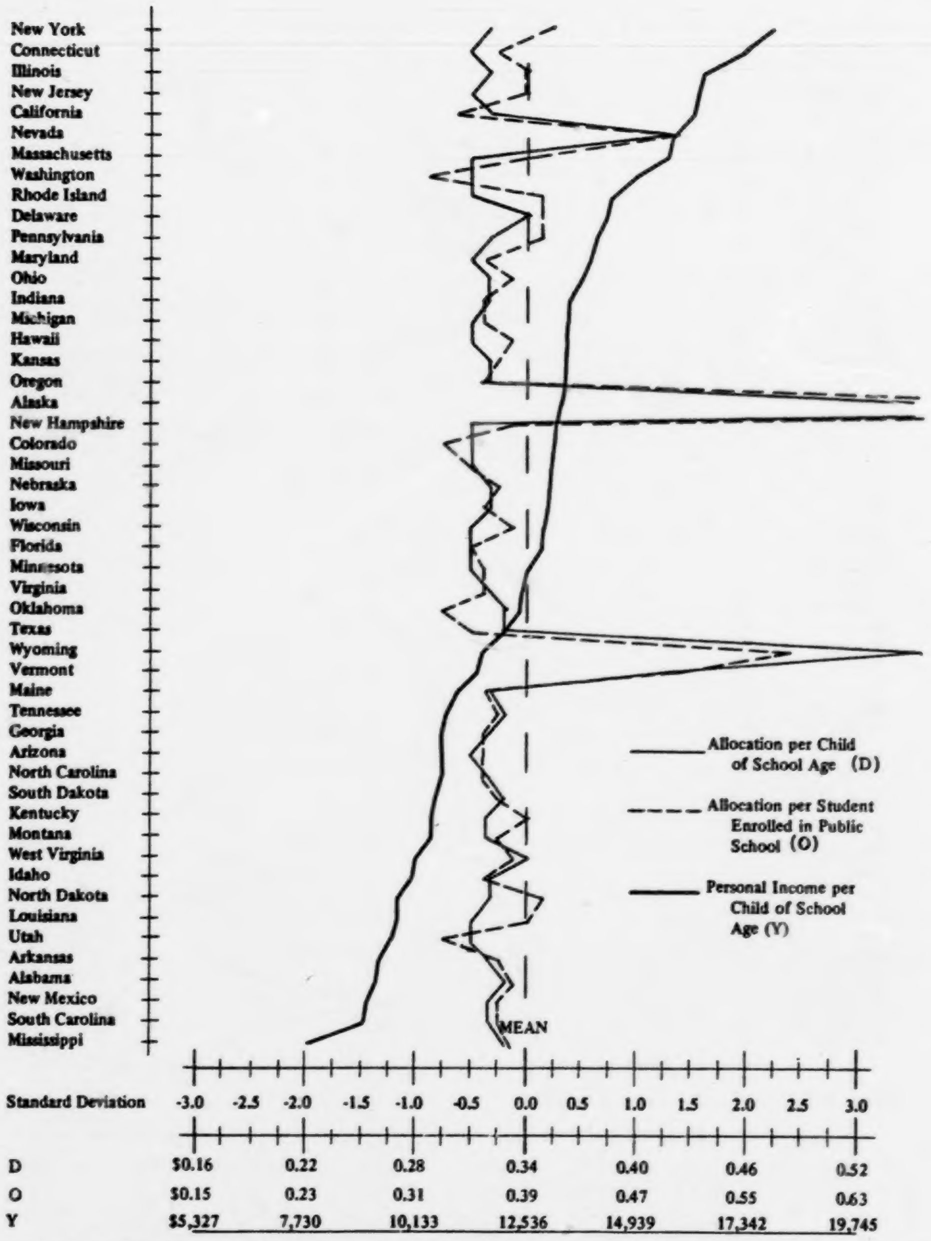


FIGURE 5. State-by-State Comparison of NDEA Title V-A Allocations and Personal Income Per Child of School Age

Funds in support of the basic grants program are allocated among the states through a rather complex formula which requires dollar-for-dollar matching by the states. In brief, allocations are based on state's relative percentages of persons in various age groups needing vocational education, weighted by a spe-

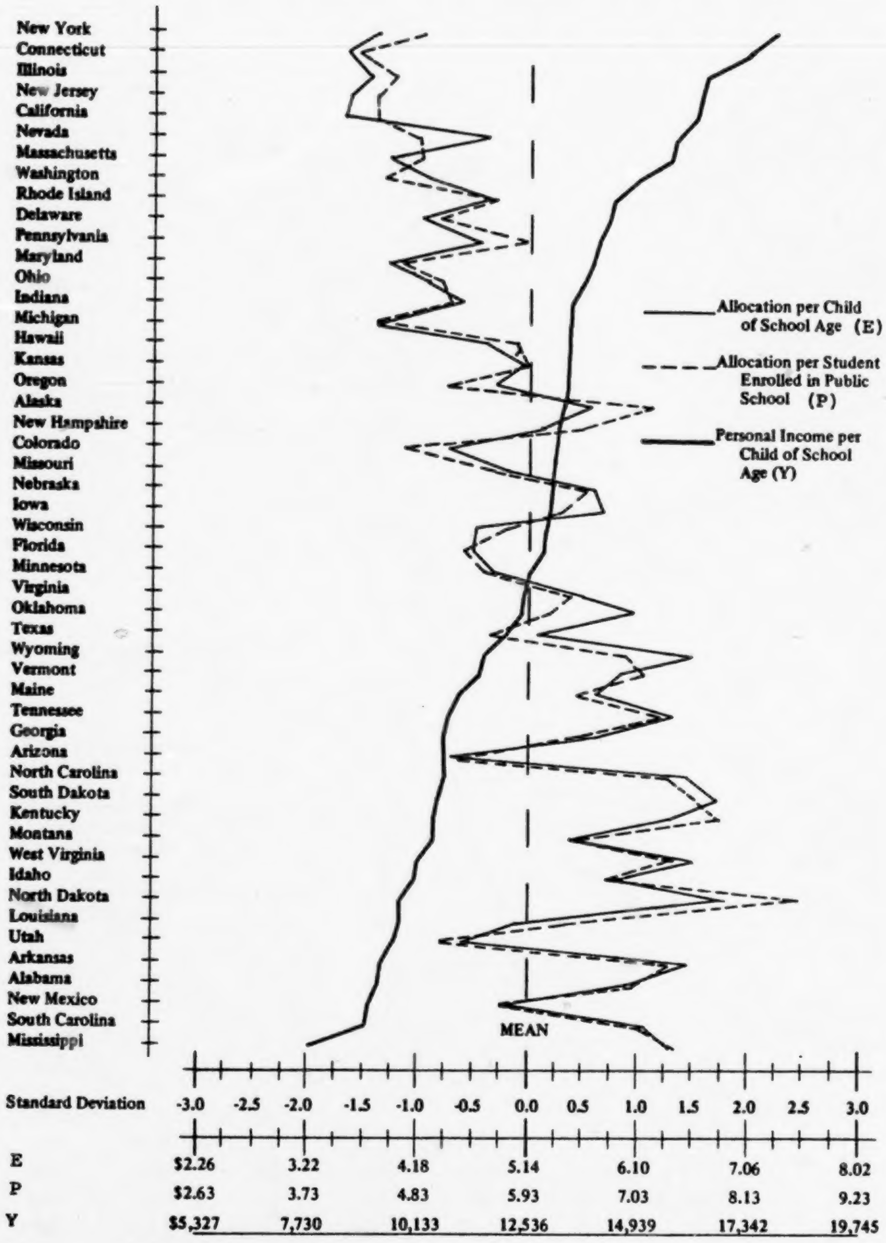


FIGURE 6. State-by-State Comparison of VEA Basic Grants Allocations and Personal Income Per Child of School Age

cific factor which considers per capita personal income of the states.

Equalization Effect of Allocation Procedure. One particular part of the distribution formula for vocational education allows for an equalizing effect. The allotment ratio for any state is set at 1.00 minus the product of 0.50 and the state's percentage of the total per capita personal income of the nation. The provisions relating to the number of persons in various age groups needing vocational education and the establishment of a maximum and a minimum in the allotment ratios of the states seem to have had a tendency to reduce the extent of the equalization which might have resulted if the distribution procedure had been based solely on relative per capita income.

However, other than Title III, NDEA the Vocational Education Act basic grants program provides the greatest equalization of any of the programs studied. Figure 6 illustrates the significant inverse relation between allocations and relative ability. The equalizing impact is recognized quite clearly when one observes that 24 of the 27 states scaled above the Y mean receive allocations per child (E) which are scaled below the mean. Of the 23 states scaled below the Y mean, 19 are scaled above the mean of P. In other words, generally the poorer states receive more funds and the wealthier states less. The states with the lowest allocations of $3.52 per child of school age are Connecticut and New Jersey. On the other hand, the states of Arkansas and Mississippi receive $6.51, and $6.38 respectively. When the allocation amounts per student enrolled in public schools (P) are compared to personal income (Y) the state receiving the lowest amount is California with $3.81 while Arkansas and Mississippi receive $7.32 and $7.38.

It should be noted also, that in the case of Vocational Education Act funds, a substantial difference exists between allocations per child of school age (E) and allocations per student enrolled in public schools (P). The t-test indicates that this variation is significant. The major deviations in these two measures are found in the states of New York, Illinois, Rhode Island, Pennsylvania, New Hampshire and North Dakota.

ESEA Title I

ESEA Title I provides financial assistance to state and local education agencies for the purpose of expanding or improving educational programs to meet the special needs of disadvantaged children. Programs are designed for (1) educationally disadvantaged children in low income areas; (2) handicapped, neglected, delinquent, and foster children; (3) children of migratory agricultural workers; and (4) American Indian children attending Bureau of Indian Affairs schools.

Basic Title I allocations are computed on the basis of counties rather than school districts. The number of eligible children is multiplied by one-half the state or national per pupil expenditure, whichever is higher. The number of eligible children is based on the number of school age children who are (1) in families with annual incomes below the established low income criterion; (2) in families receiving payment from the program of Aid to Families with Dependent Children; and (3) living in institutions for neglected or delinquent children, or living in foster homes supported by public funds.

Equalization Effect of Allocation Procedure. As indicated previously, basic Title I allocations are computed on the basis of counties by multiplying the number of eligible children by one-half the state or national average per pupil expenditure, whichever is higher. Essentially, the eligibility of children is based on the number of school age children who are from families with annual incomes below the established low-income criterion. Thus, it is through the use of the low-income criterion that the relative abilities of the states are to some extent taken into account in the allocation procedure.

The established low-income criterion of $3,000 serves to produce a significant equalizing tendency overall, but it can contribute to a disequalizing tendency for the program in certain states. A state could be relatively poor but have comparatively few families falling beneath the low-income criterion, and another state could be relatively wealthy but have comparatively greater numbers of families beneath the low-income standard.

The net effect of the feature in the allocation procedure which provides for allocations to be based in part on the state or national average expenditure, whichever is higher, is difficult to determine. States expending at rates greater than the national average obviously receive a greater allocation than justified by equalization if those states are above average in wealth. However, states spending less than the national average receive allocations which have an equalizing effect if such states are below the national average in wealth.

These allocation procedures used in Title I produce an equalizing effect. Figure 7 demonstrates the significant inverse relationship between Title I allocations and the fiscal ability of the

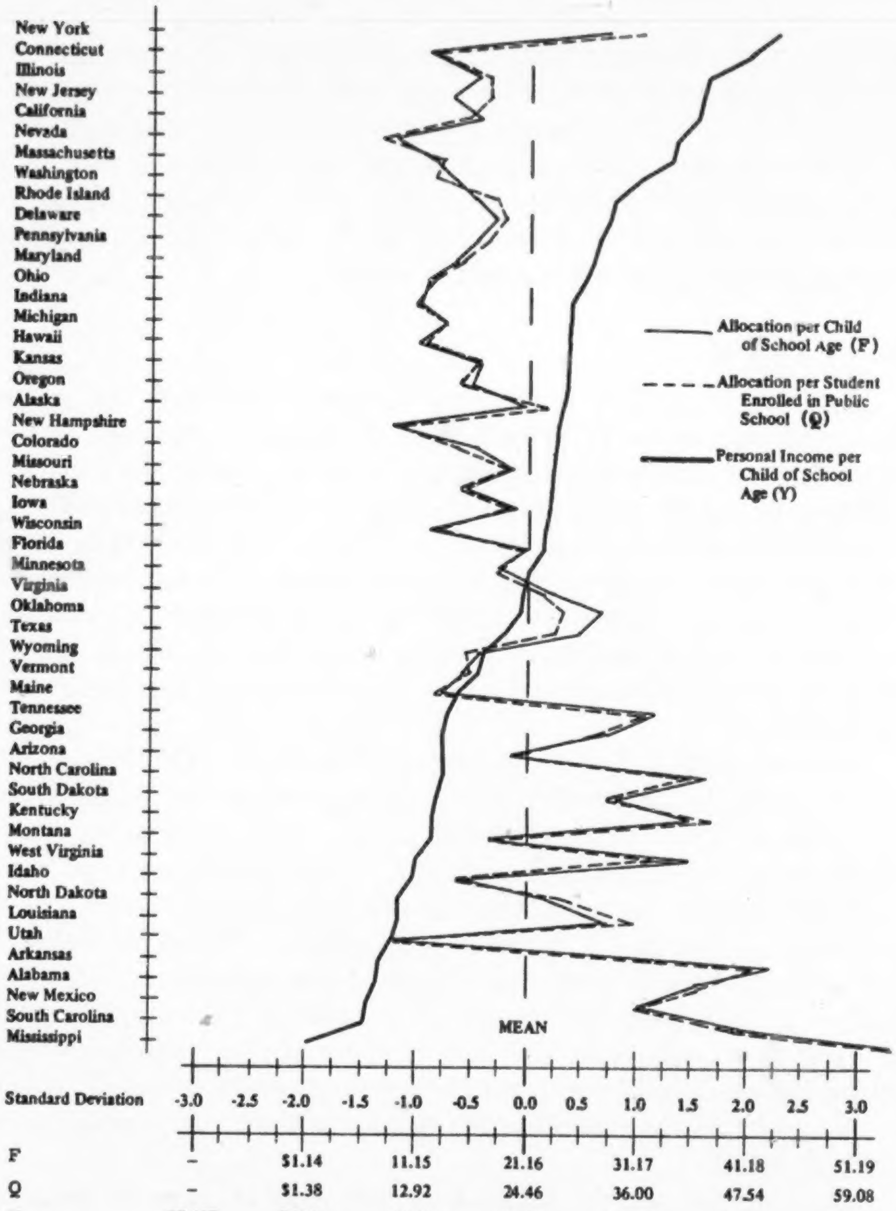


FIGURE 7. State-by-State Comparison of ESEA Title I Allocations and Personal Income Per Child of School Age

states. Of all the states with wealth above the mean in fiscal ability, only New York (Alaska is above the mean in allocations per student enrolled in public schools) receives an allocation above the mean in allocations per child of school age ($27.84 or 0.66 standard deviation). Of the 23 states falling below the mean in personal income, seven states (Wyoming, $16.83; Vermont, $15.16; Maine, $13.42; Arizona, $19.80; Montana, $17.81; Idaho, $15.36; and Utah, $9.98) are below the mean in allocation per child (F). The product-moment correlation between Title I, ESEA allocation per child of school age (F) and personal income per child of school age (Y) is −.632. Between the allocation per student enrolled in public schools (Q) and the personal income measure, the correlation is −.609.

ESEA Title II

Title II of ESEA authorizes funds to improve instruction through acquisition of school library resources, textbooks, and other printed and published materials for the use of teachers and children in public and private elementary and secondary schools. There is no matching provision in Title II, but current levels of state and local support must be maintained. Stated simply, allocations to the states are based on their numbers of children enrolled in public and private elementary and secondary schools in ratio to the number enrolled in all states and the District of Columbia.

Equalization Effect of Allocation Procedure. Of the ten programs studied, the allocation procedure of Title II, ESEA is the only one which distributes funds on the basis of relative enrollments in public and private schools. This procedure apparently accounts for the fact that this is the only appropriation of the ten studied that has a disequalizing effect. The explanation of this phenomenon is relatively simple. The wealthier states generally have a higher percentage of children of school age enrolled in private schools than the less wealthy states. Therefore, the allocation of federal funds on the basis of pupils enrolled in both public and private schools tends to have either a disequalizing or neutral effect.

Despite the wildly fluctuating patterns Figure 8 shows a generally positive relation between allocation and personal income. Examples of the Title II disequalization are illustrated by South Carolina receiving $.87 per school age child while the much more wealthy state of Connecticut receives $.96 per school age child. With regard to allocations per student enrolled Connecticut falls below the mean with $1.13 but continues to receive more than South Carolina with $.99. When allocations per child of school age (G) are correlated with personal income per child

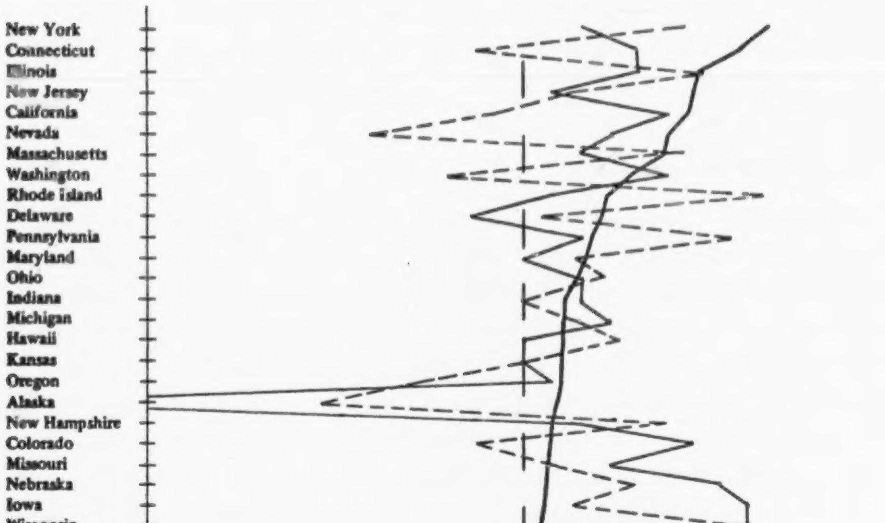


FIGURE 8. State-by-State Comparison of ESEA Title II Allocations and Personal Income Per Child of School Age

of school age (Y), the rank-order method of correlation indicated a coefficient of .486 and the product-moment method yielded a correlation of .415. The test of significance applied to the product-moment method confirmed a significant disequalizing tendency at .01 level of significance.

The t-test indicates a significant difference between the means of the two variables, child of school age (G) and student enrolled in public school (R).

ESEA Title III

Financial assistance is authorized through ESEA Title III to support supplementary educational centers and services in order to stimulate and assist in (1) providing vitally needed educational services not available in sufficient quality and quantity, and (2) establishing and developing exemplary elementary and secondary education programs to serve as models for regular school programs. From the total of the funds allocated to the states, each state receives a base amount of $200,000. Each state is then allotted a portion of the remaining balance. Half of this balance is apportioned in the same proportion that the number of children (age 5-17) in each state bears to the nation's school age population. The other half is distributed in the same proportion that the total population of each state bears to the total population of the nation.

Equalization Effect of Allocation Procedure. The feature of the allocation procedure providing a flat grant of $200,000 obviously benefits states with smaller populations (whether wealthy or poor) to a greater extent than the larger states. In many respects, it serves as a built-in minimum which contributes to the rather extreme positive deviations in the allocations of some states. However, because small states are rather widely dispersed from the standpoint of relative ability, this feature probably would not contribute in a consistent fashion to either equalization or disequalization.

The other features of the procedure also do not seem to lend themselves to specifically taking relative ability into account. It is possible, however, that allocations based on either relative school age population or relative total population, or both, could have produced a disequalizing tendency had they not been undergirded by the $200,000 factor. When one notes that ESEA Title II allocation (distributed solely on the basis of relative public and private school enrollments) resulted in a disequalizing tendency, some support is found for this hypothesis.

Title III, ESEA allocations have neither an equalizing nor disequalizing effect. Figure 9 shows great variations in patterns

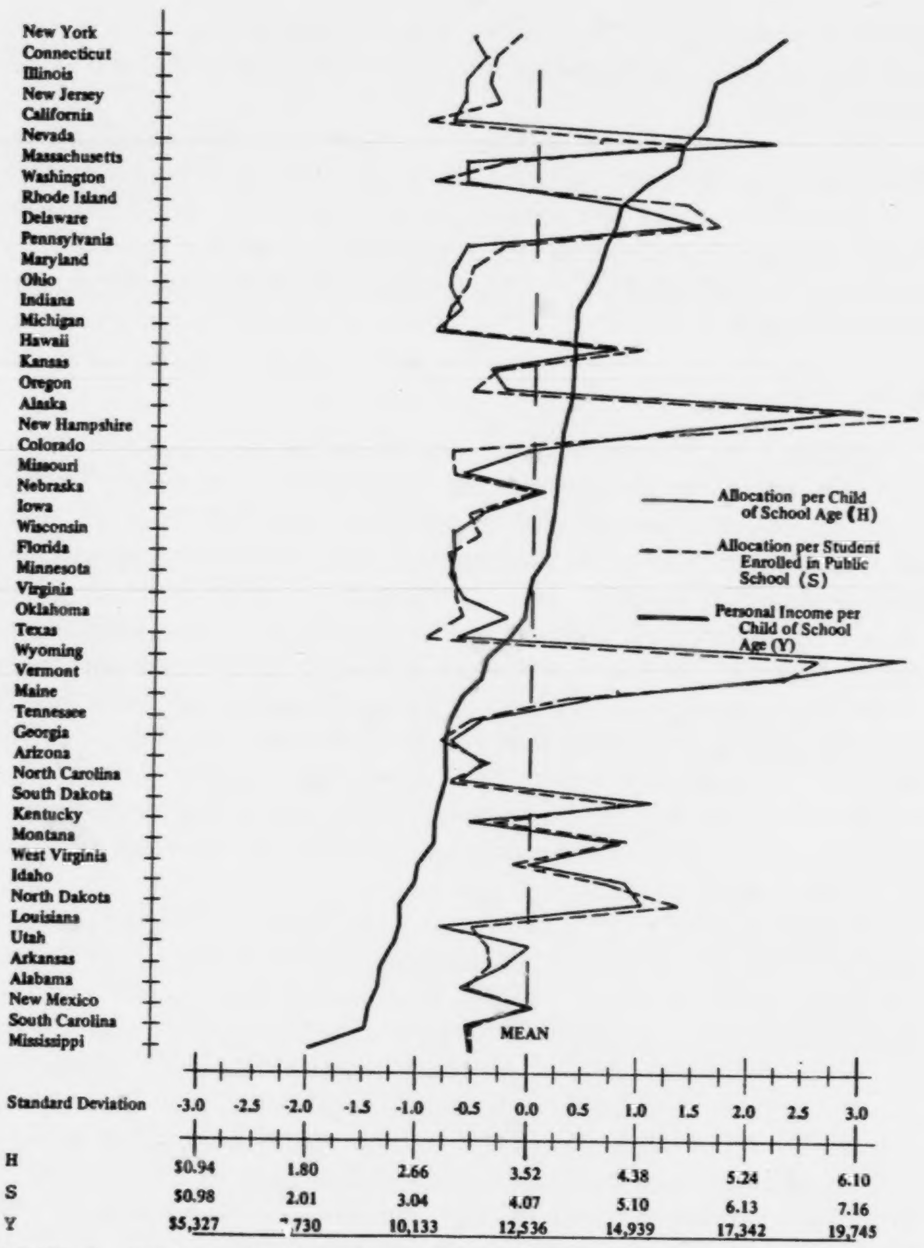


FIGURE 9. State-by-State Comparison of ESEA Title III Allocations and Personal Income Per Child of School Age

of allocations for both wealthy and poor states. It is evident that the states with smaller populations are the ones obtaining the greater fiscal benefits from the Title III formula. The formula, disregarding the fiscal ability of the states, provides a small relatively wealthy state such as Delaware with $4.79 per child of school age while giving less affluent states with larger populations such as Kentucky and Louisiana only $3.06 and $2.83 respectively.

The product-moment method of correlation indicated a correlation of −.069 between allocation per child of school age (H) and personal income per child of school age (Y), while the allocation per student enrolled (S) compared to personal income (Y) produced a coefficient of −.025, neither correlation is significant at the .05 level.

ESEA Title V

ESEA Title V authorizes grants to states, on a non-matching formula basis, to strengthen the leadership resources of their state education agencies and to reinforce their abilities to identify and meet needs of elementary and secondary education. State education agencies may participate in multi-state projects of an experimental nature. These projects are authorized through Section 505 and represent attempts to find new solutions to problems common to several or all of the states. Title V funds are allocated to the states through the following formula: (1) 40 percent of available funds is apportioned equally among the states; and (2) 60 percent is apportioned according to the ratio of the number of public school pupils in the state to the number of public school pupils in all the states.

Equalization Effect of Allocation Procedure. The 40 percent provision of the allocation procedure assumes some of the same characteristics as those of the established minimum or basic grant procedures. States with comparatively smaller populations (wealthy or poor) derive greater benefits from it. Thus, it would serve to equalize or disequalize differently in individual states. In addition, because the smaller states are rather widely dispersed in terms of relative ability, this part of the allocation procedure probably reduces any equalization tendency of the funds allocated through the 60 percent provision.

In other programs having distribution methods which include an established minimum, the extent to which extreme deviations occur in the allocations of certain states appears to be specifically related to the amount of the minimum in comparison to the total funds available for allocation. In the case of ESEA Title V, the 40 percent provision would permit flexibility for the guaranteed portion of the total available for allocation. Necessarily, it

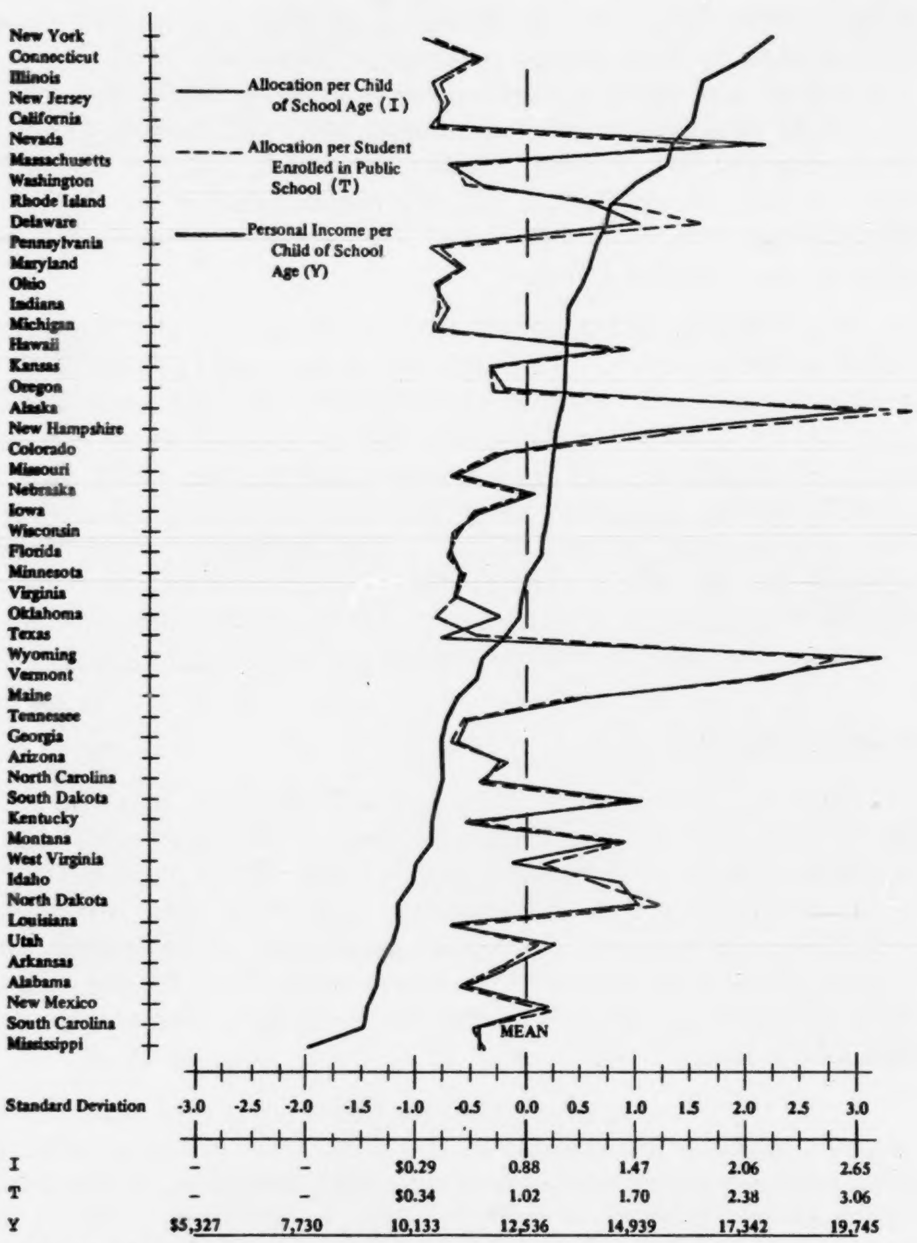


FIGURE 10. State-by-State Comparison of ESEA Title V Allocations and Personal Income Per Child of School Age

would affect the relation between allocations and ability in essentially the same way regardless of the size of the total amount of funds distributed.

Figure 10, analyzing Title V, ESEA allocations, reveals a pattern similar to that of Title III, ESEA in Figure 9. The pattern is more responsive to variations in child and student populations than to fiscal ability measures. New York receives $0.33 per school age child and Mississippi receives $0.64 per school age child, while the smaller population states of Nevada ($2.14), Delaware ($1.75), Alaska ($2.69), Wyoming ($2.77), Vermont ($2.11), and North Dakota ($1.47) obtain greater per child (I) allotments. The allocations per student enrolled in public schools (T) create a similar effect.

The evidence on the equalization tendencies of this appropriation is inconclusive. Although the Spearman rank-order correlation indicates a .05 level of significance on both variables (I and T), the product-moment correlation between allocation per child of school age (I) and personal income per child (Y) is −.127 and the allocation per student enrolled in public schools (T) and personal income (Y) is −.120, neither of which is significant at .05 level. From observing the allocation pattern shown in Figure 10, it is probably safe to say the allocation produced neutral effects, neither equalizing nor disequalizing.

ESEA Title VI-A

Title VI, Education of Handicapped Children, was added to the Elementary and Secondary Education Act through the enactment of P.L. 89-750, November 3, 1966. Part A provides assistance to the states in initiating, expanding, and improving programs and projects (including acquisition of equipment and construction of school facilities where necessary) for the education of handicapped children at the preschool, elementary and secondary levels.

From the funds appropriated for allocation to the states, each state is allocated an amount in the same ratio to the appropriation as the number of children age, 3-21 inclusive, in the state bears to the number of such children in all states. There is, however, an established minimum of $100,000 for each state.

Equalization Effect of Allocation Procedure. The established minimum of $100,000 can be seen as either equalizing or disequalizing, depending on its ratio to the total funds available, and the size of the individual state. In noting the size of the Title VI-A program for the year studied, there seems good reason to believe that the minimum did contribute to an indication of

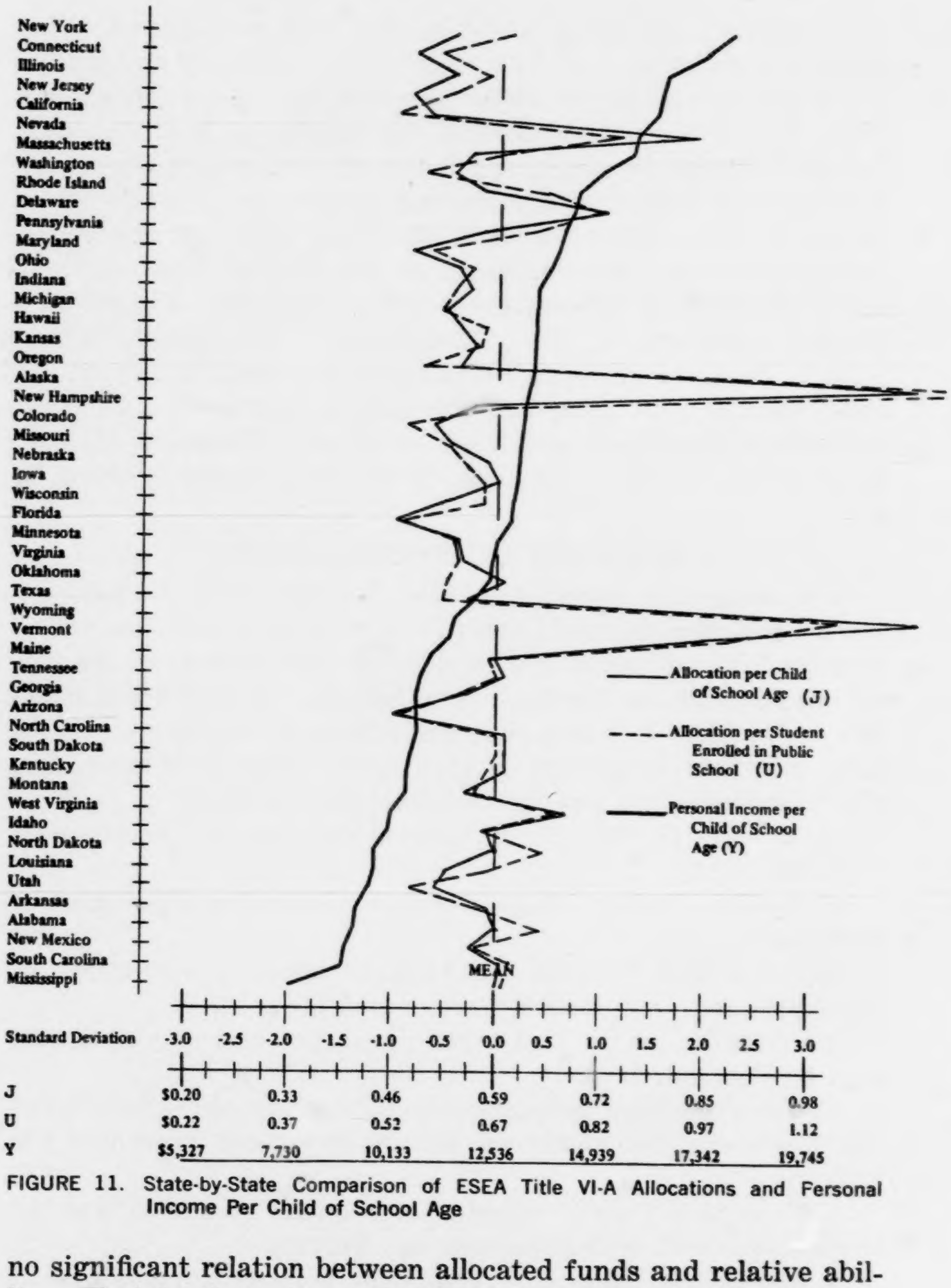


FIGURE 11. State-by-State Comparison of ESEA Title VI-A Allocations and Personal Income Per Child of School Age

no significant relation between allocated funds and relative ability. That is, the extreme deviations in allocations produced in part by the guarantee serve as equalizing factors in some states and disequalizing factors in others because of individual differences in relative ability. The effect of the minimum when combined with the provision allocating funds on the basis of states' relative populations age 3-21, was neutral when allocations are expressed in amount per child of school age. Here, once again (Fig. 11), as in Title V, ESEA, the smaller population states, Nevada, Alaska, Wyoming and Vermont receive a share disproportionate to their child and student populations. The allocations generally bear little relation to the fiscal ability of the states. Correlations were not significant at the .05 level, between the J and Y variables or between the U and Y variables. The product-moment coefficient of the former being −.101 and the latter, −.042. However, when allocations were expressed in amount per child enrolled, the Spearman correlation reported in Table 8-2 indicates a significant equalizing tendency. Therefore, the evidence on the extent of equalization of this program is inconclusive.

SUMMARY OF CORRELATIONS

Following is a summary of the correlations of the personal income per child of school age (Y) in each state with the allocations per child of school age received by each state from ten federal appropriations for the public schools. A significant negative correlation indicates that the appropriation has an equalizing effect; a significant positive correlation, a disequalizing effect; and no significant correlation, a neutral effect.

1. A—P.L. 81-874. No significant correlation, Spearman or Pearson.
2. B—P.L. 81-815. No significant correlation, Spearman or Pearson.
3. C—NDEA Title III. Significant negative correlation at the one percent level, both Spearman and Pearson.
4. D—NDEA Title V-A. No significant correlation, Spearman or Pearson.
5. E—Vocational Education Act basic grants. Significant negative correlation at the one percent level, both Spearman and Pearson.
6. F—ESEA Title I. Significant negative correlations at the one percent level, both Spearman and Pearson.
7. G—ESEA Title II. Significant positive correlations at the one percent level, both Spearman and Pearson.
8. H—ESEA Title III. No significant correlation, Spearman or Pearson.
9. I—ESEA Title V. A significant Spearman negative cor-

relation at the five percent level, no significant Pearson correlation.

10. J—ESEA Title VI-A. A significant Spearman negative correlation at the one percent level but no significant Pearson correlation.

11. K—Combined allocation from all ten programs. A significant Spearman negative correlation at the one percent level and a significant negative Pearson correlation at the five percent level.

SOME IMPLICATIONS FOR EDUCATIONAL FINANCE

There are rather strong indications that the federal government frequently has given little, if any, specific attention to the relative financial abilities of the states through the design and enactment of legislation to aid education. In addition, the allocation procedures or formulas through which funds from various federal aid programs are distributed to the states may not be producing the kinds of benefits and results intended because of the differences in the amount of funds authorized for a given program and the amount finally appropriated for allocation. In other words, a given distribution procedure or formula can be more appropriate for apportioning an amount of one size than it is for an amount either smaller or larger in size. This could be especially significant in the programs which include an established minimum amount or percentage of the funds for equal distribution among the states.

There is a considerable amount of duplication in the legislative provisions and emphasis of several of the programs. This seems to be quite true concerning the number and extent of the provisions for disadvantaged and handicapped children. As a result, there is a rather strong possibility that difficulties in coordinating the various program provisions aimed at improving education for these children could result in a reduction of the overall benefits derived. Also, this amount of duplication can produce too much emphasis on one problem at the expense of other vitally needed programs and services.

There is need for a thorough evaluation of the possible disequalizing effects of program allocation procedures which require the matching of federal funds by state and local education agencies. First, because of the varying financial abilities of the states, the less wealthy states may not always be able to take full advantage of the funds available to them. Also, one may question whether in some instances the local and/or state funds used to match the federal allocation could be used to better advantage by servicing needs other than those specified in the categorical matching programs.

There is need for reassessment and future continuous evaluation of the rationale, intent, and provisions of all of the programs studied. In other words, it should be determined whether the problems and purposes for which the programs were designed originally still merit priority attention. If so, the effectiveness of the existing legislative provisions in satisfying the legislative intent should be determined. As examples, the need for continuation of the present programs of aid to impacted areas (P.L. 81-874 and P.L. 81-815) could be greater, less, or of a different kind than is now served by these programs.

Through its provisions for several different categorical aid programs within the framework of one act, the Elementary and Secondary Education Act could be viewed as the nearest thing to general aid provided by the federal government at the time of this study. However, because of the considerable specificity of purpose in each of the titles, as well as the varying procedures and formulas used in allocating funds for the programs, the net result probably is little more than a substantial addition to the number of special purpose programs already existing prior to its enactment.

Although in this study, financial equalization is in effect defined as the allocation by the federal government of greater amounts of funds per unit of need to the less wealthy states than to the more wealthy states, some financial equalization actually results when funds are allocated to all states on the basis of a uniform amount per unit of need. This is due to the fact that the less wealthy states contribute less to the federal treasury through taxes per unit of need than the more wealthy states. Therefore, even a fixed flat grant per unit of need has a redistributional equalizing effect. However, allocating more funds per unit of need to the less wealthy states than to the more wealthy states has a greater equalizing effect than allocation on the basis of a uniform amount per unit of need.

Finally, it seems that categorical aid, a problem-centered and/or crisis-oriented approach to financial assistance, does not frequently lend itself to specific recognition of the underlying differences in the relative ability of the states to finance education or to their overall educational needs. Better solutions to these problems could probably be found in consolidating many categorical grants into "block grants" or better yet, by providing a substantial general grant.

FOOTNOTES

1. Grant Venn, *Man, Education and Work*, Washington, D. C.: American Council on Education, 1964, p. 1.

2. See Chapter 7 for a complete description of all federal grants for education.

3. Frank J. Munger and Richard R. Fenno, Jr., *National Politics and Federal Aid to Education*. Syracuse, N. Y.: Syracuse University Press, 1962. p. 19.

4. 80th Congress, 2d Session, 94 *Congressional Record*, 1948, p. 3290.

5. Erick L. Lindman, "Criteria for Evaluating Federal Education Programs," in *The Challenge of Change in School Finance*. Committee on Educational Finance, Washington, D. C.: National Education Association, p. 26.

6. Roe L. Johns and Edgar L. Morphet, *The Economics and Financing of Education*. Englewood Cliffs, N. J.: Prentice-Hall, Inc., p. 435.

7. See: Edgar H. Bedenbaugh, Jr., "Extent of Financial Equalization Among the States from Ten Programs of Federal Aid to Education," Ed.D. dissertation, University of Florida, 1970. This chapter is based on this study which was sponsored by the National Educational Finance Project.

8. Advisory Commission on Intergovernmental Relations, Report of the Commission, *The Role of Equalization in Federal Grants*. Washington, D. C.: U. S. Government Printing Office, 1964, p. 48.

9. *Ibid.*, p. 63.

10. *Ibid.*, p. 64.

11. Maw Lin Lee, "A Model of the Distribution of Federal Expenditures Among States," in *Journal of the American Statistical Association*, Vol. LXV, No. 329, March, 1970, p. 136.

12. *Ibid.*, pp. 147-148.

13. See: Myron L. Anderson, "A Financial Analysis of Title I, Public Law 89-10 and the Formation of a Defensible Federal Financial Aid Plan," Ed.D. dissertation, Indiana University, 1967.

14. S. Kern Alexander, "Trends and Issues in School Finance," in *Interdependence in School Finance*, Committee on Educational Finance, Washington, D. C.: National Education Association, 1968, p. 154.

15. Roe L. Johns and Edgar L. Morphet, *Financing the Public Schools*. Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1960, p. 55.

CHAPTER 9

The Relationship Between Revenue Allocations and Educational Need as Reflected by Achievement Test Scores[1]

DONALD S. VAN FLEET
AND
GERALD BOARDMAN

Much has been said and written about improving the quality of public schools and providing equal educational opportunity for all youth in the United States. *Ad valorem* taxes have been one of the prime sources of revenue for the support of local school districts. However, the value of property to be taxed has varied widely among the local school districts. The result has been that there is great disparity both in the level of financial support of education programs within the states and in the equality of the tax burdens on the citizens.

The fiscal problems are accompanied by even more perplexing educational problems. Concentrations of educationally deprived children, who need higher cost educational programs to meet their needs, add stress to the fiscal systems from which school districts derive their resources. Furthermore, achievement levels in measurable knowledge and skills vary widely among school districts. Do our systems of fiscal support tend to increase or decrease disparities in achievement among the school districts of a state? In all of the states except Hawaii, school districts receive tax revenue from federal, state and local sources.

---

[1] This chapter summarizes a study made by Donald S. Van Fleet, *A Study of the Relationship Between Title I, State and Local Funds, and Pupil Achievement Within Selected States*, Doctoral dissertation, Gainesville, Florida: University of Florida. This study was sponsored by the National Educational Finance Project.

The researchers for the Designing Education for the Future Project concluded: "As we plan the financing of education in the future, it is desirable that financial models be developed which will integrate the funds received by the public schools from federal, state and local sources into a plan that will tend to equalize educational opportunity and optimize the output of the school social system."[2]

FINANCING EQUAL EDUCATIONAL OPPORTUNITY

This chapter presents a summary of a study sponsored by the National Educational Finance Project which was designed to determine the extent to which revenues from federal, state and local sources were reaching culturally different or culturally disadvantaged children. In other words, do districts with concentrations of culturally disadvantaged children receive more or less money per pupil from federal, from state and from local sources than districts that do not have these concentrations? Following are some of the basic assumptions upon which this study is based:

1. Low school achievement is highly associated with cultural disadvantages and low socio-economic level. Coleman and many other investigators have validated this assumption.
2. Compensatory education for the culturally disadvantaged costs more per pupil than the educational program needed by non-culturally disadvantaged or non-handicapped children. The evidence presented in Volume 3 of the National Educational Finance Project entitled, *Planning to Finance Education* substantiates this assumption.
3. If districts with low achievement levels have less money available per pupil than districts with high achievement levels, educational opportunity is being disequalized because financial disparities will tend to continue or even increase achievement disparities.

---

[2] Edgar L. Morphet and David L. Jesser, eds. *Emerging Designs for Education*, Denver, Colorado: Designing Education for the Future, 1968, p. 218.

4. Standardized tests are satisfactory for measuring certain important achievement objectives of the schools.

5. If educational opportunity is to be equalized and present disparities among districts in educational achievement are reduced, districts with high concentrations of the culturally disadvantaged children should be provided with more revenue per pupil than districts without such concentrations. It is assumed that unmet educational needs are greatest in the districts with the lowest educational achievement levels.

EQUALITY OF EDUCATIONAL OPPORTUNITY AND TITLE I

The investigation which is reported in the following sections sought to examine the allocations of local, state and certain federal funds to determine their relationship to educational need as reflected by standardized test scores.

The Design of the Study

This study was designed to examine the relationships that existed between various revenues available to local school districts and the mean standardized test scores within each of eight selected states. In order that this study could be conducted, it was necessary that the names of the states remain confidential.

The goal of this study was to investigate the relationships that existed between the amount of revenue available from various sources to local school districts and the educational need of pupils in these districts as reflected by mean standardized achievement test scores. The specific aim of the study was directed to determining the extent to which Title I revenue, state revenue and local revenue reached the target population, the culturally different, when standardized achievement tests were used to identify this population. The revenues considered were those available in 1968-69 to local school districts from local funds, from state aid and from Title I of ESEA. Although this represents most of the total revenue available to districts, such special funds as transportation and capital outlay allocations were not included in the revenue data for any of the states.

The sample used in this study was 10 percent of the total school districts in each of the selected states, randomly selected, or thirty districts, whichever was larger. If there was a total of less than thirty school districts in the entire state, then all of the school districts in that state were included.

Two factors limited the selection of districts in the sample. First, the states selected had to have a state-wide testing program in grades two through eight, inclusive. Second, school districts of less than 1,500 pupils were not considered in the sample. The number of districts included from each of the eight states was as follows: State A—forty-eight districts, State B—twenty-eight districts, State C—twenty-one districts, State D—eighteen districts, State E—forty-seven districts, State F—forty districts, State G—forty-six districts, and State H—thirty-six districts.

For each local school district in the sample the following four basic kinds of data were collected: (a) local revenue available 1968-69, (b) state revenue allocations for 1968-69, (c) Title I revenue allocations for 1968-69, (d) standardized achievement test data for one grade, grades two through eight inclusive, in 1968-69. The test data for State A were in the form of mean grade equivalents for the third grade using the Stanford Achievement Test Battery. In State B, the test data were in the form of mean grade equivalents for the fifth grade using California Achievement Tests. The test data for State C were in the form of mean raw scores for the fourth grade using the Stanford Achievement Tests. The test data for State D were in the form of mean raw scores for grade level five using the Metropolitan Achievement Tests. In State E, the test data were in the form of mean raw scores for the third grade using standardized state department prepared achievement tests. State F had test data in the form of mean grade equivalents for the fifth grade using Iowa Tests of Basic Skills. State G had sixth grade test data in the form of mean raw scores using the Stanford Reading Tests. The test data for State H were in the form of mean grade equivalents for the eighth grade using the California Achievement Tests.

The basic statistical technique used to examine the relationship between the revenue data and the test data was the Pearson Product Moment Correlation. The study actually included arithmetic, language and composite achievement means, in addition to the reading achievement means which are discussed in this chapter. Reading achievement was found to be representative of the total achievement score in every instance. For this reason the reading achievement relationship to the revenue available from the various sources was analyzed independent of the other test data in order that the results might be presented with clarity and conciseness.

RELATIONSHIP OF REVENUE PER PUPIL TO SCHOOL ACHIEVEMENT

The results of the study are presented in the following sequence:

1. Relationship of local revenue available per pupil to mean reading achievement test scores.
2. Relationship of state revenue available per pupil to mean reading achievement test scores.
3. Relationship of Title I revenue available per pupil to mean reading achievement test scores.
4. Relationship of combined local and state revenue available per pupil to mean reading achievement test scores.
5. Relationship of combined local, state and Title I revenue available per pupil to mean reading achievement test scores.

Relationships of Local Revenue Available to Mean Reading Achievement Test Scores

The local revenue allocation data are shown in Table 9-1 for each of the states and are discussed in the following section. The

TABLE 9-1

CORRELATION OF LOCAL REVENUE AVAILABLE WITH ACHIEVEMENT IN 1968-69

	Mean Local Revenue Available Per Pupil in ADA	*Range in Local Revenue Per Pupil*	*Percent of Total Revenue*	*Local Revenue Correlation With Mean Reading Achievement*
State A	$179.85	64 — 431	34.09	0.5441**
State B	474.95	304 — 742	65.32	0.0677
State C	645.97	432 — 833	89.23	0.3106
State D	173.13	56 — 322	24.68	0.5593*
State E	546.90	29 — 1,764	46.12	0.2873
State F	593.26	299 — 882	72.28	0.1964
State G	424.17	157 — 758	61.81	0.4327**
State H	75.72	7 — 232	16.63	0.4773**

**Significant at the .05 level.
*Significant at the .01 level.

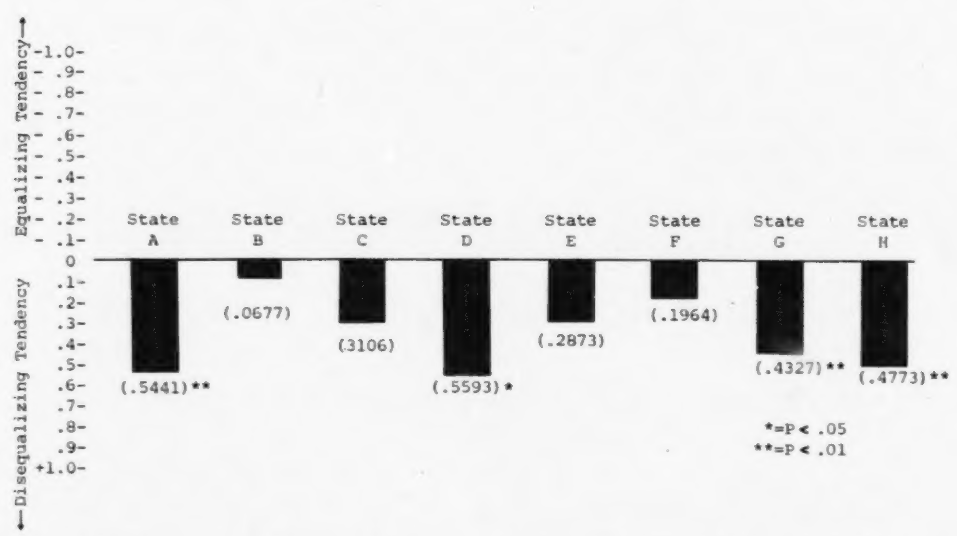


FIGURE 1. Correlations Between the Local Revenue Allocations and the Mean Reading Achievement Test Scores in Eight Selected States in 1968-69

correlations between local revenue and educational need as reflected in reading achievement test scores are illustrated graphically in Figure 1. In all tables and figures that follow, the symbol ** indicates statistical significance at the .05 (or 5 percent) level and the symbol * indicates significance at the .01 (or 1 percent) level.

In districts A, D, G and H, the amount of local revenue available per pupil is significantly correlated positively with reading achievement. If it can be assumed that additional financial resources will increase educational achievement, then in states A, D, G and H, the additional local funds available in the high achievement districts in those states have the effect of widening the achievement differences among the school districts in those states.

The higher educational attainment in the high achievement districts is undoubtedly affected favorably by socio-economic and cultural advantages. When those advantages are reinforced by more local revenue per pupil than the low achievement districts, wide differences among the districts in educational achievement will continue.

Although the correlations were not statistically significant in state B, C, E and F, they were all positive. Therefore, in none of the eight states studied did local funds have the effect of equalizing achievement differentials.

TABLE 9-2
CORRELATION OF STATE REVENUE AVAILABLE WITH ACHIEVEMENT IN 1968-69

	Mean State Revenue Available Per Pupil in ADA	*Range in State Revenue Per Pupil*	*Percent of Total Revenue*	*State Revenue Correlation With Mean Reading Achievement*
State A	$300.49	254 — 361	56.95	− 0.7097**
State B	236.21	29 — 361	32.48	− 0.0493
State C	69.91	15 — 164	9.66	0.0144
State D	511.40	316 — 942	72.88	− 0.2248
State E	622.00	322 — 910	52.45	− 0.1006
State F	211.92	23 — 284	25.82	0.1793
State G	249.30	142 — 383	36.32	− 0.3217*
State H	327.36	229 — 691	71.89	− 0.2037

**Significant at the .05 level.
*Significant at the .01 level.

It will also be noted from Table 9-1 that there were wide ranges among the districts of all of the states studied in the amount of local funds available per pupil, however, the range was much wider in some states than in other states.

Relationship of State Revenue Available to Mean Reading Achievement Test Scores

The state revenue allocation data are shown in Table 9-2 for each of the states. The correlations between state revenue allo-

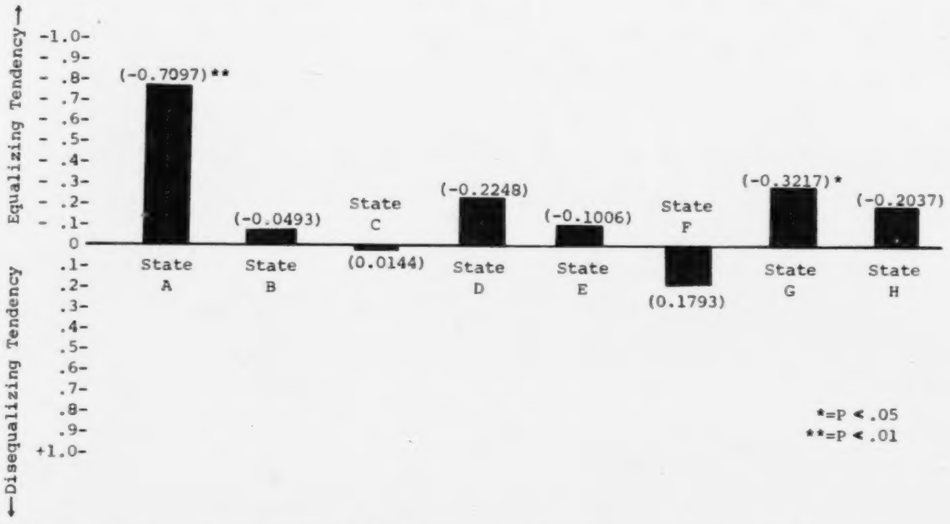


FIGURE 2. Correlations Between State Revenue Allocations and Mean Reading Achievement Test Scores in Eight Selected States in 1968-69

cations and reading achievement test scores are illustrated graphically in Figure 2.

State revenue allocations per pupil were significantly correlated negatively with reading achievements in states A and G. This indicates that state funds might be tending, in these two states, to reduce achievement disparities among the school districts.

The data show that state revenue allocations were not significantly related to the mean standardized reading achievement test scores in six out of the eight states. However, in four of those six states, the relationship was negative. In none of the eight states studied did state funds have a significant tendency to increase achievement disparities among the districts.

Relationship of Title I Revenue Available to Reading Achievement Test Scores

The Title I revenue allocation data are shown in Table 9-3 for each of the states. The correlations between Title I revenue allocations and reading achievement test scores are illustrated graphically in Figure 3. It is noted from Table 9-3 that in seven of the eight states studied, Title I allocations per pupil are correlated significantly negatively with reading achievement scores and in the remaining state, the correlation is negative although non-significant. This means that Title I money is actually reach-

TABLE 9-3

CORRELATION OF TITLE I REVENUE AVAILABLE WITH ACHIEVEMENT IN 1968-69

	Mean Title I Revenue Available Per Pupil in ADA	*Range in Title I Revenue Per Pupil*	*Percent of Total Revenue*	*Title I Revenue Correlation With Mean Reading Achievement*
State A	$47.22	7 — 95	8.96	−0.7728**
State B	15.93	3 — 56	2.20	−0.4413*
State C	8.03	1 — 19	1.11	−0.4715*
State D	17.09	0 — 65	2.44	−0.6299**
State E	16.91	2 — 48	1.43	−0.6747**
State F	15.58	0 — 34	1.90	−0.1253
State G	12.81	0 — 35	1.87	−0.6601**
State H	52.29	2 — 143	11.48	−0.6022**

**Significant at the .05 level.
*Significant at the .01 level.

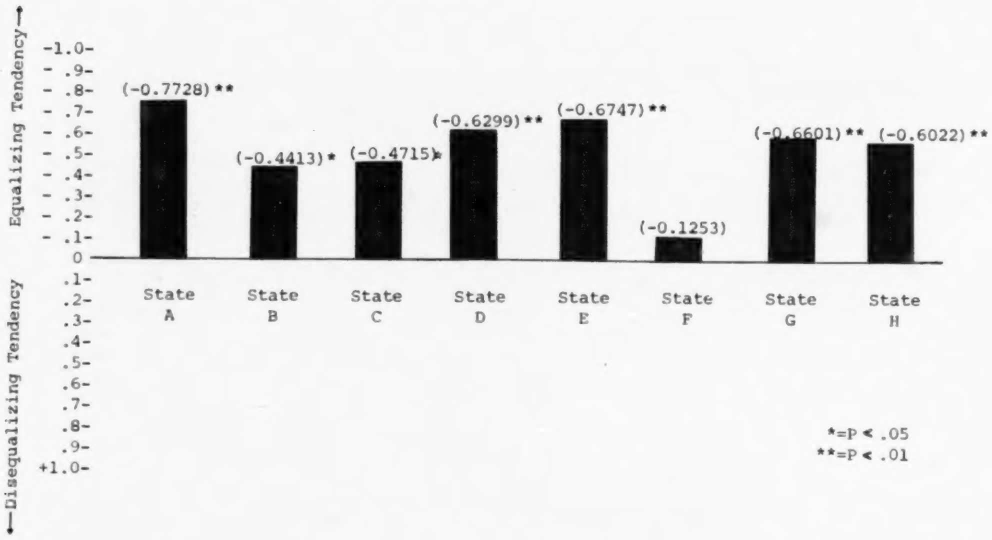


FIGURE 3. Correlations Between Title I Revenue Allocations and Mean Reading Achievement Test Scores in Eight Selected States in 1968-69

ing the target population, the low achievers, for which it was intended. Title I money comprises a very small percent of the total revenue in six of the eight districts studied. In fact, state and local revenue amounted to from 89 to 99 percent of the total revenue available in the eight districts. Since local revenues and state revenues generally are not reaching the target population, the low achievers, in such additional amounts as to tend to reduce achievement disparities, Title I of ESEA at the present time provides the only significant revenue available specifically for reducing achievement disparities.

As has been pointed out, Title I money is significantly going to those local school districts with the greatest need of increasing educational achievement as measured by standardized test reading scores. This is an interesting result in that Title I funds are allocated largely on the basis of family income. Further, the achievement tests were administered in statewide programs which were unrelated to Title I. Some critics of Title I have alleged that Title I money is not reaching the culturally disadvantaged low achievers. The evidence presented in this study shows that that charge is largely groundless. Figure 3 illustrates the inverse relationship that was found between the mean allocation of Title I money and the mean reading achievement test results in each of the eight selected states.

TABLE 9-4

CORRELATION OF COMBINED LOCAL AND STATE REVENUE AVAILABLE WITH ACHIEVEMENT IN 1968-69

	Combined Mean Local and State Revenue Available Per Pupil in ADA	*Range in Combined Mean Local and State Revenue Per Pupil*	*Percent of Total Revenue*	*Combined Mean Local and State Revenue Correlation With Mean Reading Achievement*
State A	$ 480.34	339 — 693	91.04	0.4028**
State B	711.16	336 — 1,012	97.80	0.0351
State C	715.88	469 — 962	98.89	0.2880
State D	684.53	373 — 1,032	97.56	0.1587
State E	1,168.90	676 — 2,357	98.57	0.3130*
State F	805.15	510 — 1,158	98.10	0.2395
State G	673.47	480 — 943	98.13	0.4183**
State H	403.08	276 — 789	88.52	−0.0332

**Significant at the .05 level.
*Significant at the .01 level.

Relationship of Combined Local and State Revenue Available to Mean Reading Achievement Test Scores

The correlations between combined local and state revenue available per pupil and mean reading achievement test scores are all shown in Table 9-4. In seven of the eight states, the correlations between total state and local revenue available and reading

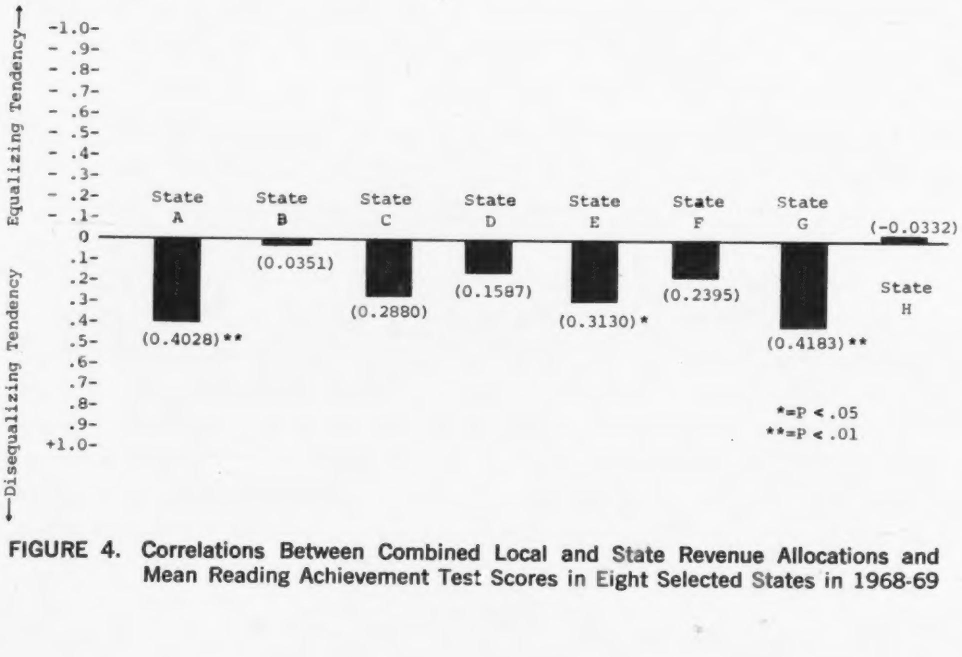


FIGURE 4. Correlations Between Combined Local and State Revenue Allocations and Mean Reading Achievement Test Scores in Eight Selected States in 1968-69

TABLE 9-5

CORRELATION OF TOTAL REVENUE AVAILABLE WITH ACHIEVEMENT IN 1968-69

	Mean Total Revenue Available	*Range in Total Revenue Per Pupil*	*Correlations With Mean Reading Achievement*
State A	$ 527.56	$ 59.40	0.1729
State B	727.09	131.20	−0.0076
State C	723.91	118.34	0.2783
State D	701.62	132.65	0.0802
State E	1,185.81	288.16	0.2891*
State F	820.76	110.07	0.2339
State G	686.28	122.85	0.3748*
State H	455.37	138.74	0.1663

*Significant at the .01 level.

achievement test scores are positive and in three states, the correlations are significantly positive. In other words, the districts with the lowest achievement levels have the least amount of revenue available per pupil from state and local sources.

A comparison of the data in Figures 1, 2 and 4 indicates that the slight equalizing effects of the state allocation formulas are reversed when combined with local allocations. This was particularly true in states A and G in which significantly negative correlations between state allocations and achievement scores were completely reversed. In these two states combined state and local revenue per pupil was significantly positively correlated with mean reading achievement.

Relationship of Total Revenue to Reading Achievement Test Scores

Table 9-5, in six out of the eight states studied, shows there was no significant negative correlation between combined local, state and Title I revenue per pupil and mean reading achievement test scores. In the two states in which the relationships were significant, the correlations were both positive.

Total revenue allocations per pupil then tended to be greatest in the districts with the highest achievement levels. This fact might be interpreted to mean that more revenue per pupil produced higher achievement. It is reasonable to assume that additional financial inputs do produce additional educational achievement. However, as pointed out elsewhere in this volume, greater

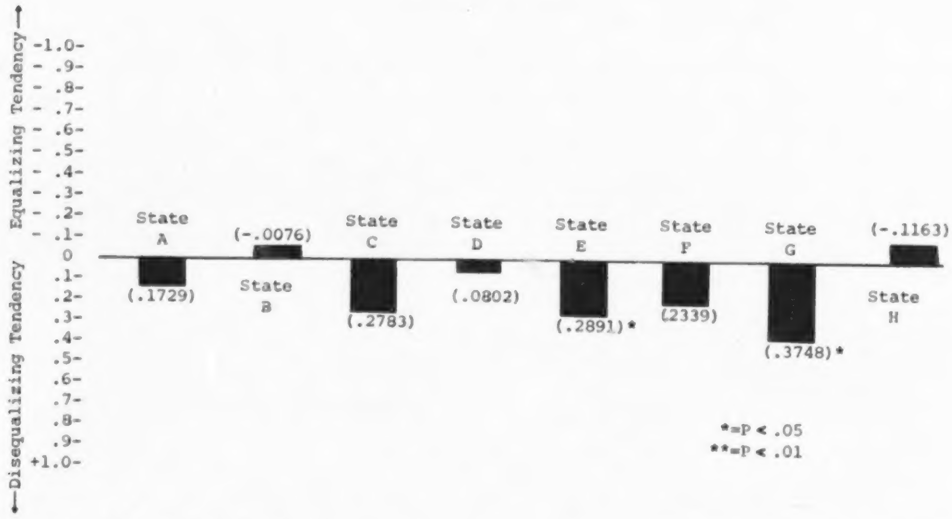


FIGURE 5. Correlations Between the Total Revenue Allocations and the Mean Reading Achievement Test Scores in Eight Selected States in 1968-69

revenue available per pupil in school districts is associated with the greater wealth of those districts and greater wealth is associated with higher socio-economic status. Therefore, in the states studied, the higher achievement of the pupils has probably been influenced more by the cultural level of the parents than by the additional revenue per pupil available in those districts.

When the correlations illustrated in Figures 4 and 5 are compared, the impact of Title I allocations in equalizing educational opportunity can be observed. Despite the disproportionately small amount of money realized per child from Title I as compared to the total money allocated, when Title I funds were added to the total allocations there was a trend in every instance toward less positive correlations between mean total allocations and the mean reading achievement levels.

Relationship of Socio-economic Level to Reading Achievement Scores

What influence did the socio-economic level of the people have on the average reading scores of the districts in the eight states studied? Fortunately data on the socio-economic level of each district are available in a study made by Dewey Stollar and Gerald Boardman for the National Educational Finance Project entitled *Personal Income By School Districts in the United States*. This publication shows the personal income by income

TABLE 9-6

CORRELATION BETWEEN SOCIO-ECONOMIC LEVEL AND READING SCORES

State	*Correlation Between Percent of Income Tax Returns of Less Than $3,000 Income and Reading Scores*	*Correlation Between Percent of Income Tax Returns of More Than $10,000 Income and Reading Scores*
(Col. 1)	*(Col. 2)*	*(Col. 3)*
A	−.6738*	.6798*
B	−.2772	.5789*
C	.0383	.3206
D	−.4754**	.7420*
E	−.4824*	.5060*
F	−.0120	.2341
G	−.3325**	.7367*
H	−.4705*	.4845*

**Significant at the .05 level.
*Significant at the .01 level.

class for all 19,000 school districts in the United States. Numerous studies have shown that there is a high correlation between income and the cultural level of the people. Table 9-6 shows that there was a significant negative correlation between the percent of incomes of less than $3,000 and reading scores in 5 of the eight states. Column 3 shows that there was a significant positive correlation between the percent of income tax returns of $10,000 and above and reading scores in 6 of the 8 states studied. As already stated, the research staff of the National Educational Finance Project agreed to keep the names of the eight states studied confidential. However without violating that agreement, it can be stated that states C and F (the states that showed no significant correlation between socio-economic level and reading scores) had a very low percentage of minority ethnic groups that are generally culturally disadvantaged. Each of the six states showing a significant correlation between socio-economic level and reading scores had substantial numbers of the culturally disadvantaged minorities. It is interesting to observe from Table 9-6 that the positive correlations of percent of returns of $10,000 or more with reading scores are slightly higher than the negative correlations of percent of returns of $3,000 and less in seven of the eight states.

Which has the highest association (correlation) with reading scores—total revenue per pupil or socio-economic level of the

TABLE 9-7

CORRELATION OF REVENUE PER PUPIL WITH READING SCORES CONTRASTED WITH CORRELATION OF SOCIO-ECONOMIC LEVEL WITH READING SCORES

State	*Correlation of Total Revenue per Pupil with Reading Scores*	*Correlation of Total Revenue per Pupil with Percent of Income Tax Returns of $10,000 and Above*	*Correlation of Total Revenue per Pupil with Reading Scores with Percent of Income Tax Returns of $10,000 and Above Held Constant Statistically****
(Col. 1)	*(Col. 2)*	*(Col. 3)*	*(Col. 4)*
A	.1729	.2884**	−.0330
B	−.0076	.3284	−.2567
C	.2783	.4405**	.1612
D	.0802	.3471	−.2821
E	.2891*	.6862*	−.0926
F	.2339	.0992	−.2178
G	.3748*	.1794	.3647**
H	−.1663	.0536	−.2201

*Significant at the .01 level.

**Significant at the .05 level.

***This method is designed to measure the association of variation in revenue per pupil with variation in reading scores after the influence of variations in the socio-economic level on reading scores has been mathematically eliminated.

parents? Table 9-7 presents some interesting information relating to this question. Column 2 shows that correlation between total revenue and reading scores was positive in 6 of the 8 states but significant in only 2 states. The correlations were actually negative but nonsignificant in two states.

Column 3 of Table 9-7 shows that the amount of total revenue per pupil was positively correlated with percent of incomes of $10,000 and above in 7 of the 8 states and significantly correlated in 3 states. This suggests that the tendency of higher expenditures per pupil to be associated with higher reading scores may be due more to variations in the cultural levels of the parents than to variations in per pupil revenue. This hypothesis is verified in column 4 which shows the correlations between revenue per pupil and reading scores with the percent of incomes of $10,000 or more held constant. All positive correlations shown in column 2 are shown in column 4 to be decreased or changed to negative correlations and all negative correlations were increased by eliminating the influence of socio-economic level on reading scores. In only one state was there a significant positive correlation between revenue per pupil and reading scores after the influence of socio-economic level on reading scores had been eliminated.

What can one conclude from the data presented in Tables 9-6 and 9-7? About the only conclusion that can be safely made is that variations in the socio-economic level of parents is much more highly associated with variations in the reading scores than variations in per pupil revenue. This is consistent with the findings of the Coleman Report.

Can one conclude from the data presented in Tables 9-6 and 9-7 that there is no relationship between achievement of pupils (school output) and revenue or expenditure per pupil? The answer is no for the following reasons:

1. The data on revenue per pupil reported in this study included revenue for all pupils, high school as well as elementary pupils. The data on reading scores ranged from grades 3 to 8. It was not possible from the data available to allocate revenues to the grade levels being tested.

2. It was not possible from the data available to determine the amount of school revenue spent on the *teaching of reading* in each district. Unfortunately, data on program costs are almost completely unavailable throughout the United States. Until data on program costs are available and program objectives are determined, it is impossible to assess the relationship between school outputs and inputs of school revenue. For example, it is quite possible that a district with a relatively low total amount of revenue per pupil has assigned a high priority to the teaching of reading and is actually spending more per pupil on the teaching of reading than another district which has more total revenue available per pupil, but it has not given as high a priority to the teaching of reading.

THE PATTERN OF REVENUE ALLOCATIONS WITHIN EACH OF THE EIGHT STATES

The impact of Title I allocations becomes apparent when compared to allocations of revenue from other sources within each of the eight selected states. Should variations in educational need, as reflected by variations in pupil achievement, be considered in future educational finance planning? If low school achievement districts were allocated more money per pupil, would this place a premium on local inefficiency? On the other hand, if high achievement districts have more money available than low achievement districts, would not such a fiscal policy increase achievement disparities? The evidence presented in this chapter does not provide answers to these questions. However, the assumption is made that less money available per pupil in low achievement districts certainly cannot be expected to reduce achievement disparities.

Figures 6 through 13 at the end of this chapter show the revenue allocation patterns found in the eight states selected for this study. Similarities in allocations from one state to another become readily apparent when one scans the eight figures. More local revenue is available per pupil in every instance in those districts which have higher mean achievement scores.

There was considerable variation in the correlations of state allocations per pupil with mean achievement scores; however, state funds generally were more likely to reach the culturally disadvantaged, low achievers in greater amounts than local revenue. The effectiveness of state aid and local revenue in meeting problems of cultural differences may be readily compared to the same effectiveness of Title I allocations. In all eight states, Title I funds were far more effective in reading low achievers than local and state revenues.

CONCLUSIONS

The following conclusions based on the evidence in this investigation appear justified:

1. Local revenues do not equalize educational opportunity for the culturally different pupils. In general, the districts with the lowest achievement levels and the greatest concentrations of culturally disadvantaged, have the least local revenue available per pupil.

2. State aid formulas have great potential for funding the higher per pupil costs of educating the culturally disadvantaged. However, in all but two of the eight states studied, there is but little indication that present state formulas make adequate provision for funding these higher costs.

3. Title I revenue funds, more than any other revenue source considered in this study, are allocated to those districts where pupils had the greatest educational need as reflected by mean achievement test scores.

4. Local and state revenues combined were not significantly reaching those districts with the greatest educational need as reflected by mean achievement test scores.

The amount of funds expended from the non-equalizing revenue sources tends to lessen the impact of revenue equalization programs where they do exist. For example, although Title I revenue allocations were effective in reaching those districts whose pupils had the lowest mean achievement scores, Title I funds accounted for no more than 11.48 percent of the combined local, state, and Title I revenue allocations in any of the eight states studied and it comprised less than three percent of total revenue in six states. When combined revenue allocations (Title I, local, and state) were correlated with achievement test data, the inverse relationship between Title I allocations and the achievement test variables was reversed in six of the eight states.

5. Achievement test scores appear to be adequate identification criteria for defining those local school districts with a high concentration of children from low-income families. This generalization was supported by the fact that, considering that Title I allocations were made on the basis of low family income levels, inverse relationships were found in every instance between Title I allocations and the reading achievement test results from testing programs conducted independently of Title I programs. Therefore, it seems logical to conclude that low mean test scores provided evidence of concentrations of low-income families.

6. If disparities are to be effectively reduced, either the states must adapt their allocation formulas to allow more effective identification of target populations of the culturally different, thereby assuming a larger role in compensatory funding, or the federal program must be substantially increased beyond the present level of support.

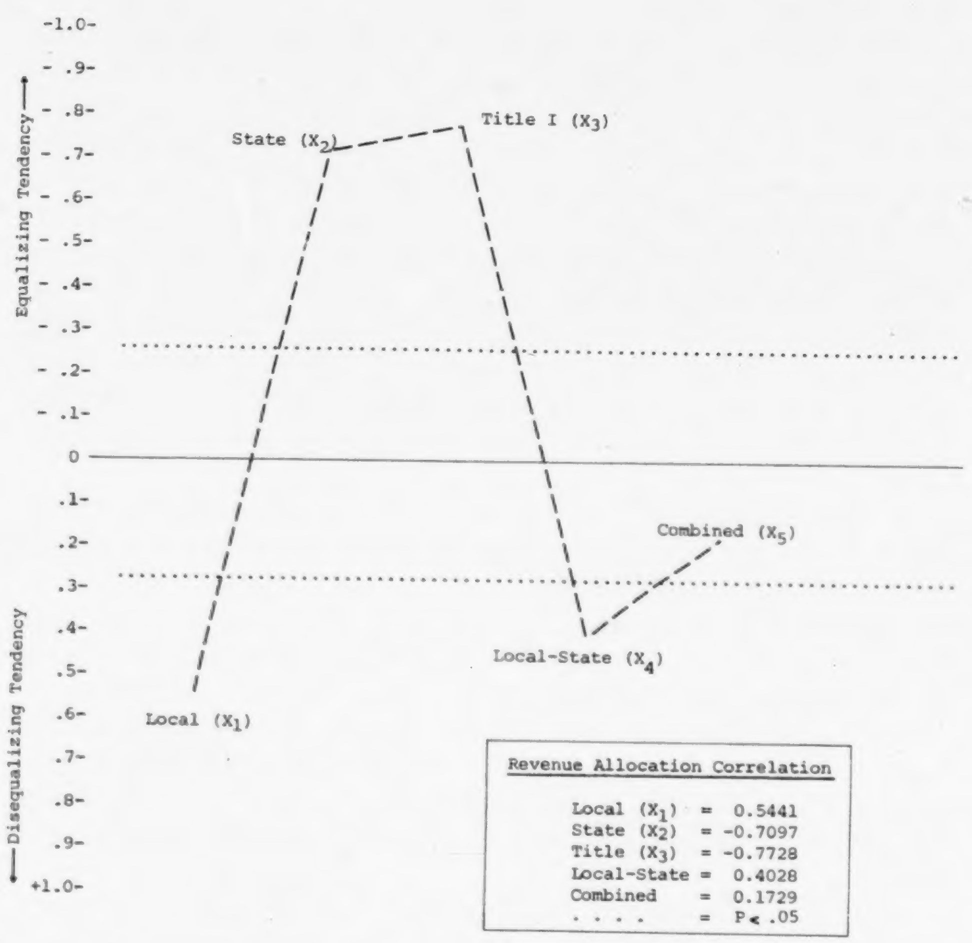


FIGURE 6. Correlations Between Reading Achievement and Revenue Allocations in State A in 1968-69

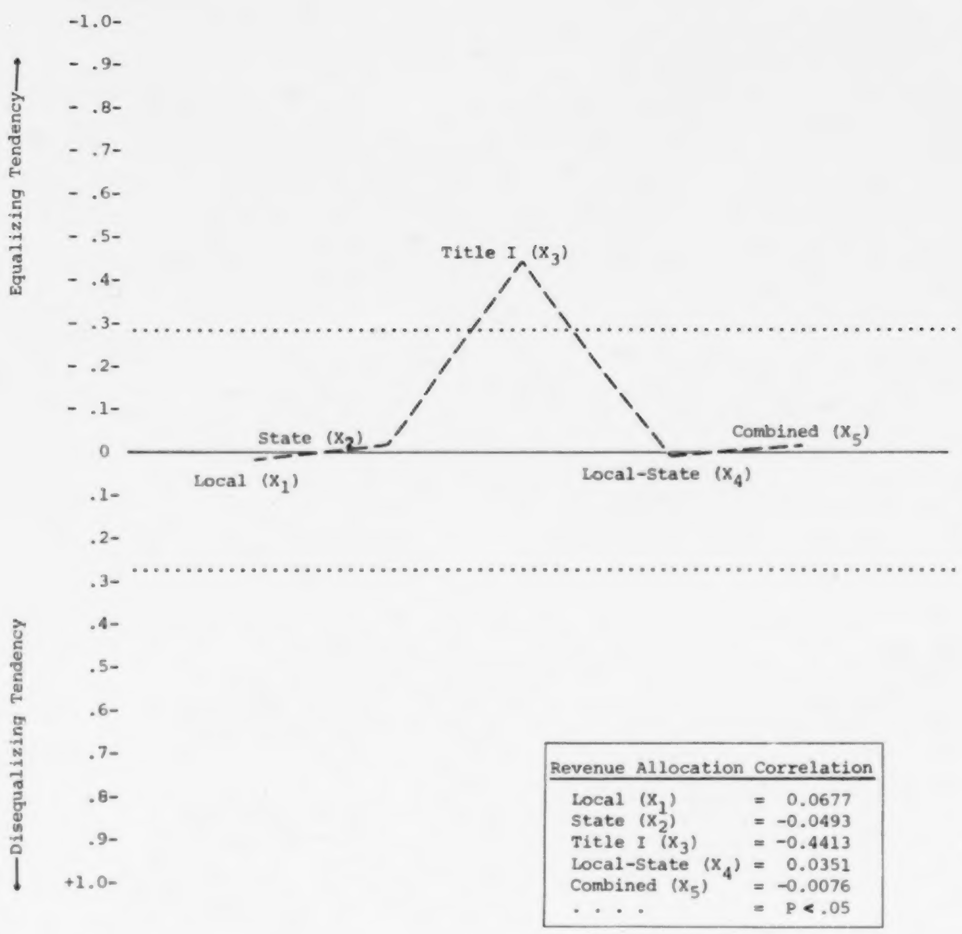


FIGURE 7. Correlations Between Reading Achievement and Revenue Allocations in State B in 1968-69

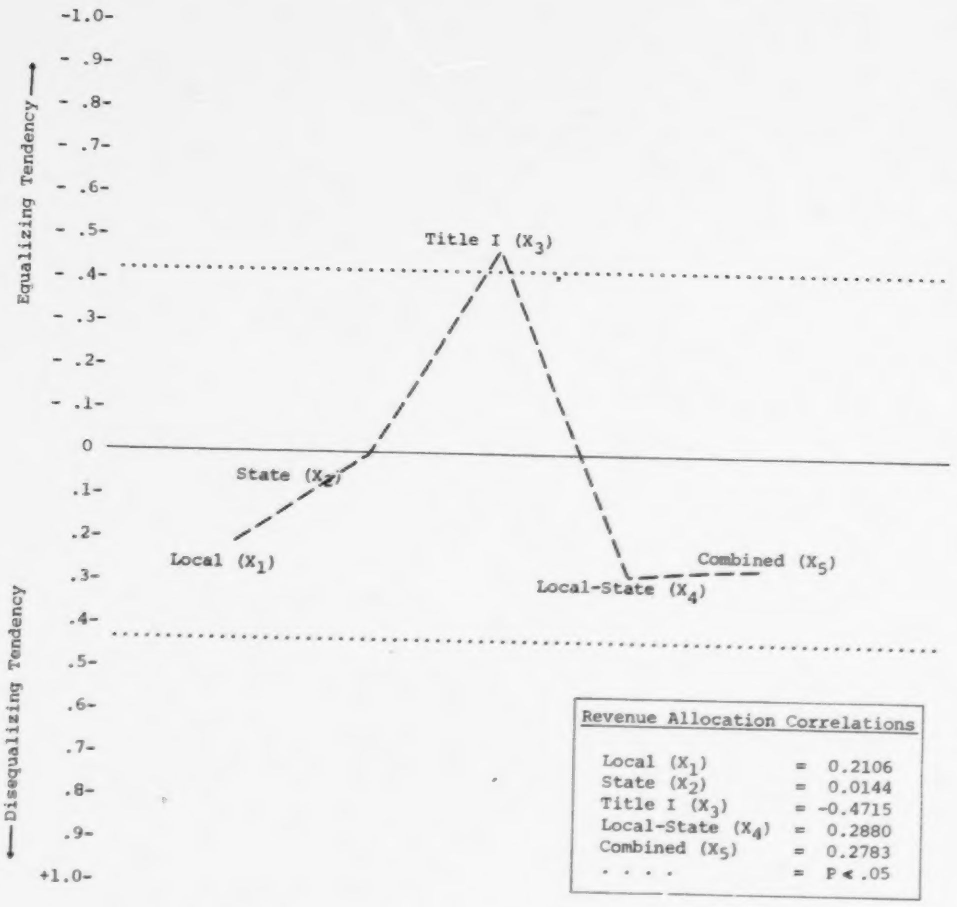


FIGURE 8. Correlations Between Reading Achievement and Revenue Allocations in State C in 1968-69

319

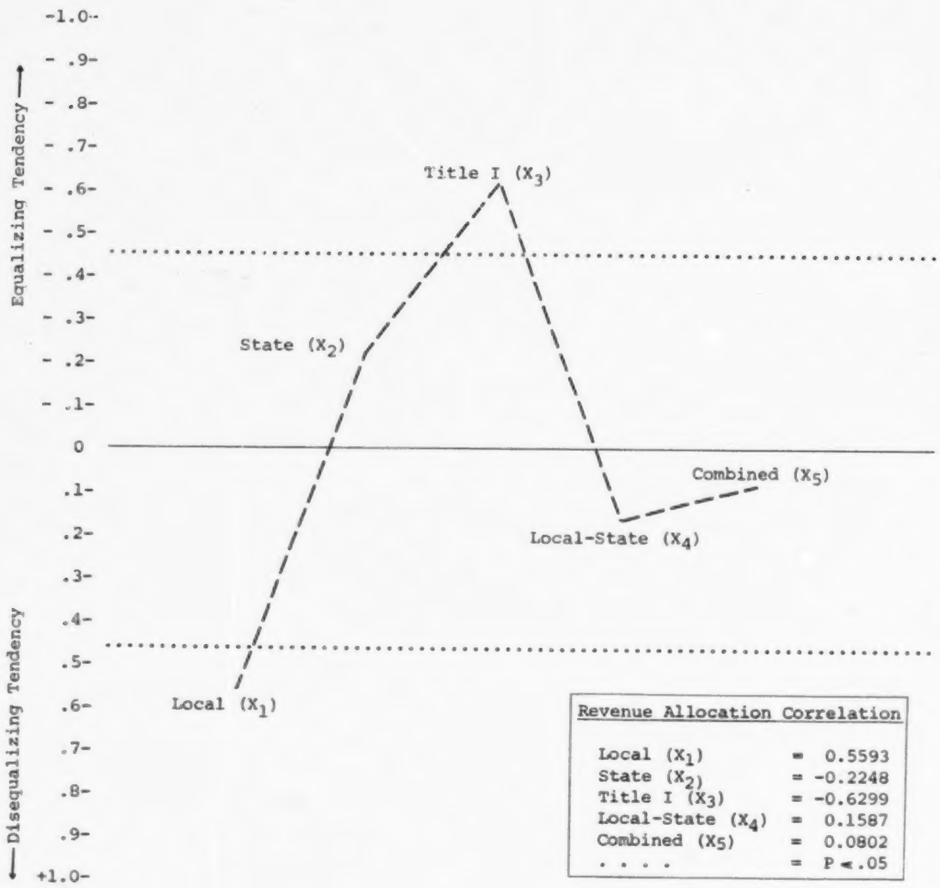


FIGURE 9. Correlations Between Reading Achievement and Revenue Allocations in State D in 1968-69

320

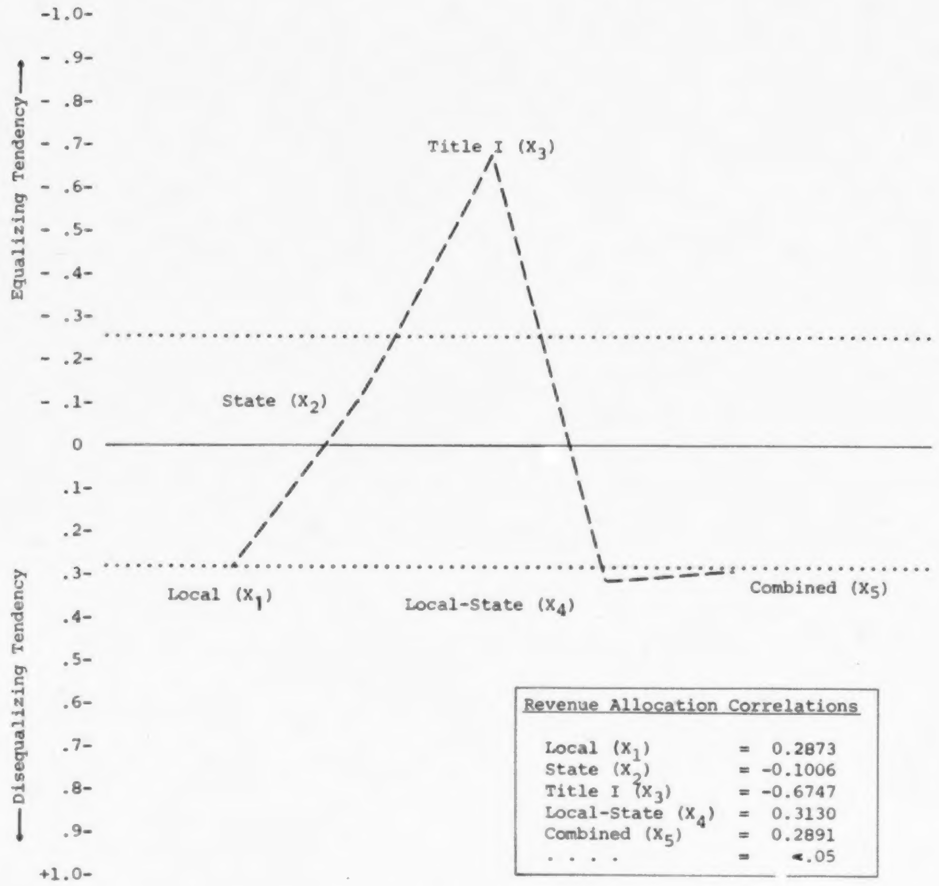


FIGURE 10. Correlations Between Reading Achievement and Revenue Allocations in State E in 1968-69

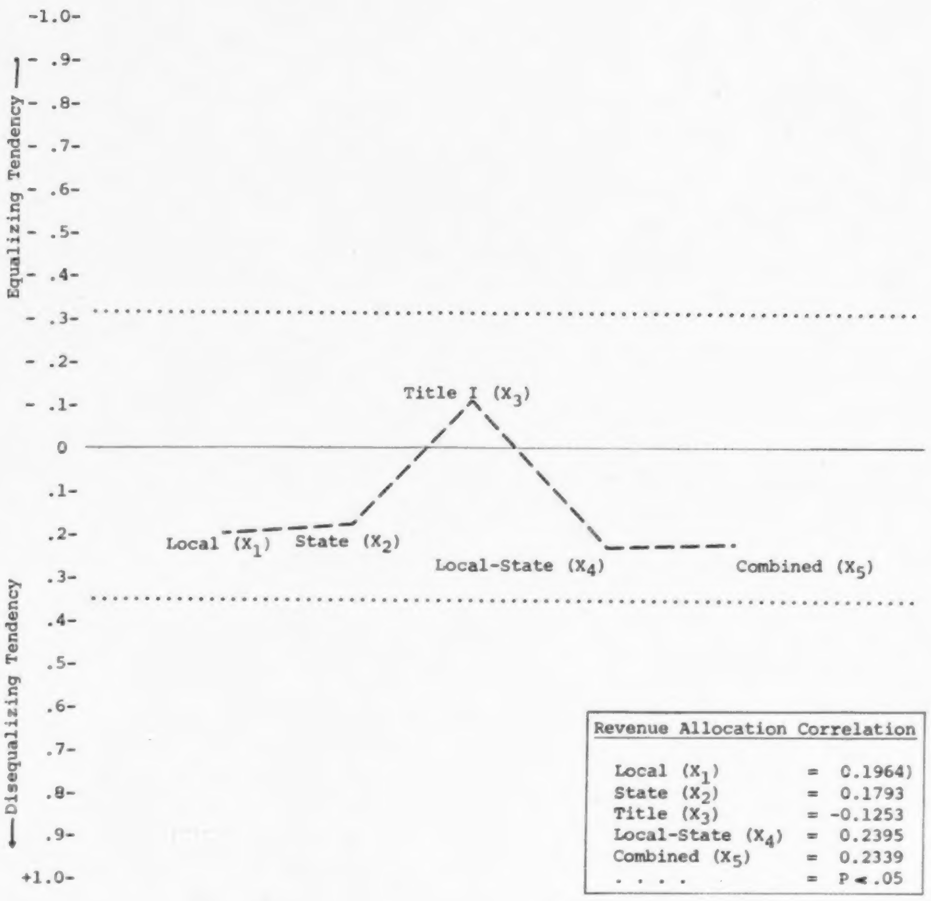


FIGURE 11. Correlations Between Reading Achievement and Revenue Allocations in State F in 1968-69

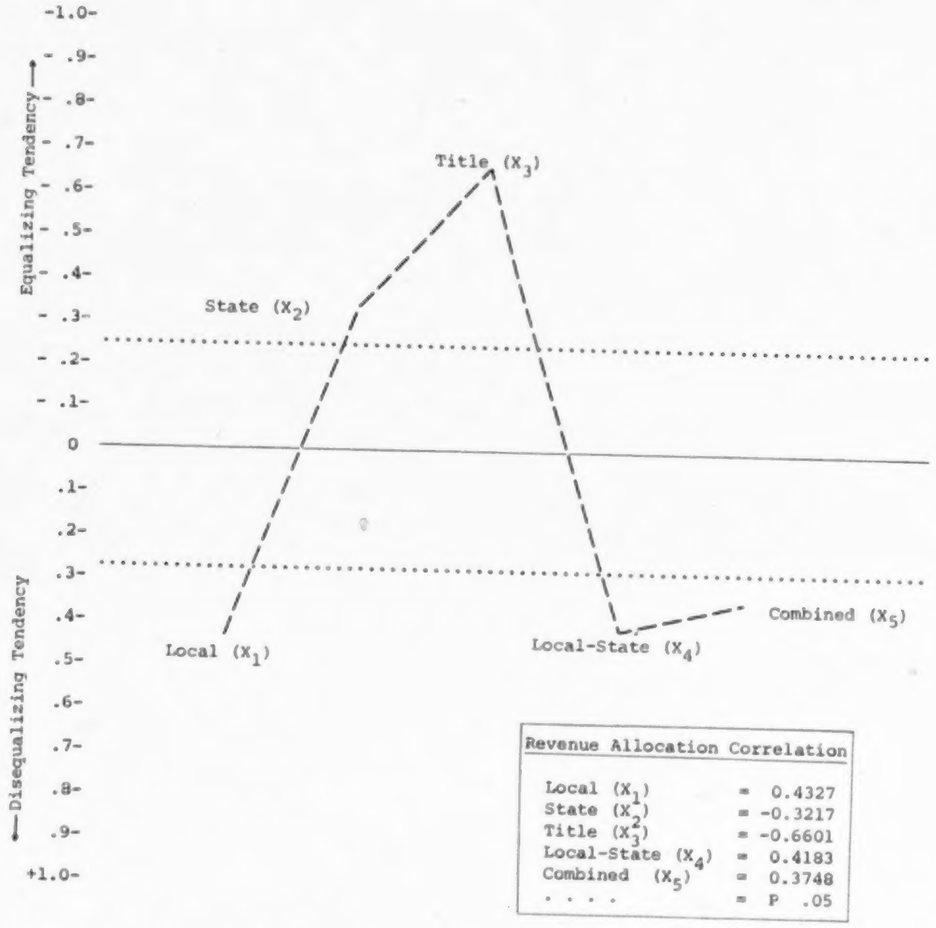


FIGURE 12. Correlations Between Reading Achievement and Revenue Allocations in State G in 1968-69

323

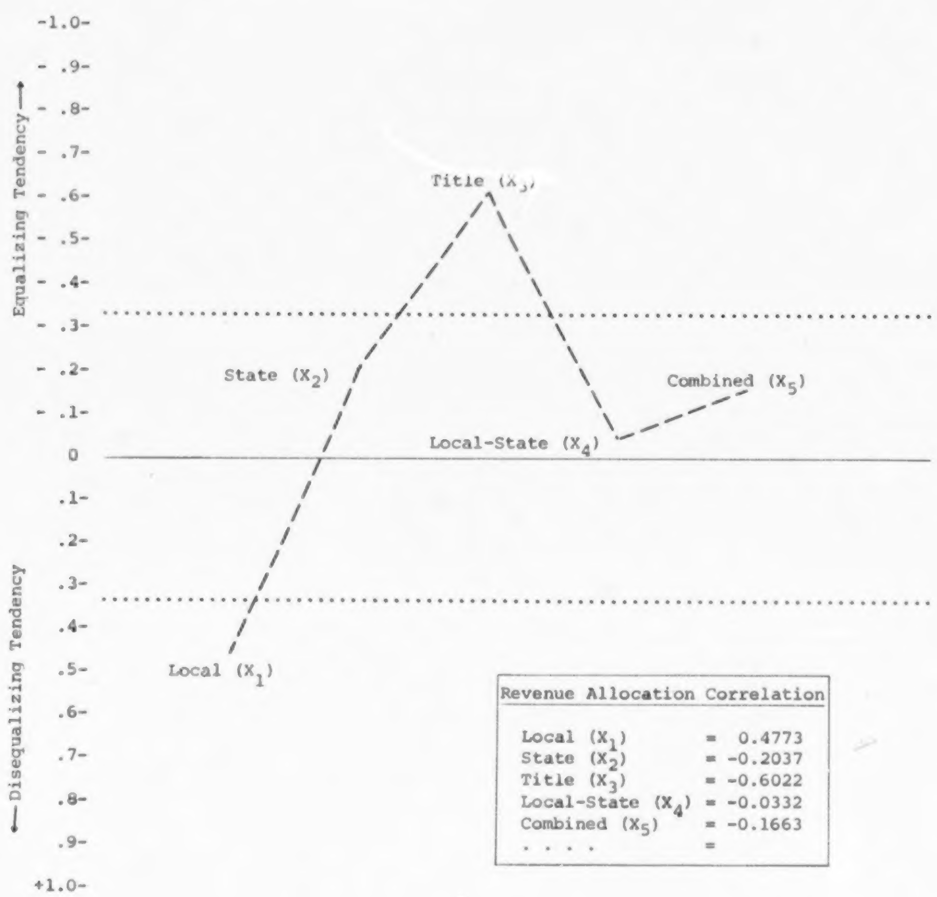


FIGURE 13. Correlations Between Reading Achievement and Revenue Allocations in State H in 1968-69

CHAPTER 10

Intent and Effect of Title I ESEA in the Financial Equalization of Public Elementary and Secondary Education

JOHN F. WAGNER
AND
DEWEY STOLLAR

Equality of educational opportunity has been and continues to be an issue of fundamental importance to public education in the United States. In fact, "belief in the right of every individual to equal opportunity, and in political democracy as the guarantee of that right, created the public schools of this country."[1] With the writing and adoption of the Constitution of the United States, the federal government did not assume primary responsibility for education; education became a responsibility of the various states. It was assumed that schools which grew out of local needs and interest would be adequate for the nation. However, early in the nation's history, the federal government offered encouragement and help to states and localities in the support of public education. The Ordinance of 1785 set aside one square mile in every township in the northwest territory to be used for the support of public education. Thus, a national interest in education began and has endured.

Several different methods have been employed by the federal government in distributing aid to education. The principal methods are as follows:

> (1) Allotted on the basis of land areas, (2) distributed in proportion to population figures, (3) awarded to the

> states as flat grants, (4) given on condition that matching funds are provided from state and local revenues, (5) provided as the cost of an educational program or of operating a school, (6) apportioned to meet a federal obligation such as payment in lieu of taxes on federally owned property, (7) allocated as equalization aid to provide greater assistance to the financially weaker areas, (8) paid to cover the cost of tuition and of other educational expenses of individuals, and (9) granted in accordance with contracts for services on research programs in various colleges, universities and industries.[2]

All of these methods have been used at one time or another in providing federal aid for education, but the different methods do not have the same effects toward providing equal educational opportunities.

> (The matching funds method) . . . is the most inequitable method used in distributing federal aid. The most equitable method would be to distribute federal funds on the basis of the census of children 5-17 years of age.[3]

There are varying concepts of equalization. It may be an allocation of the uniform amount of federal funds for each state, or it may mean equal appropriation of funds per unit of need, such as per person. Equalization could also be described as grants designed and measured by the educational level of state compared to national standards; this method would necessitate the supplying of the largest amounts of funds to states with the lowest educational ranking. If it can be assumed that increases in financial support will raise the quality of educational output, then the following definition of equalization appears logical:

> Equalization is a provision in a grant program, either in the allocation or matching, or both, which gives some statutory recognition to underlying differences in the states' relative capacities to raise funds from their own resources for financing a joint federal-state program, in order to achieve more uniform program standards throughout the nation.[4]

However, the question of equalization exists within states as it does among states. "The evidence indicates that the range in educational opportunities available within most states is considerably greater than the differences in the averages for the various states."[5]

The need for equalization of educational opportunity has been recognized by many for a number of years. In 1965, President Johnson pointed out the inequality of educational opportunity which existed in the United States and the need for the federal government to equalize it. President Johnson stated:

> The burden of the nation's schools is not evenly distributed. Low-income families are heavily concentrated in particular urban neighborhoods or rural areas. Faced with the largest educational needs, many of these school districts have inadequate financial resources. This imbalance has been increased by the movement from cities to the suburbs (of high income families) . . . and their replacement by low-income families.[6]

THE ELEMENTARY AND SECONDARY EDUCATION ACT OF 1965

The Elementary and Secondary Education Act (ESEA), Public Law 89-10, was the response to the conditions outlined by President Johnson. "This was the most important federal act affecting elementary and secondary schools passed by Congress up to 1965."[7] Approximately $1.3 billion annually was appropriated to support the programs in the act. Federal aid available to elementary and secondary schools was doubled, increasing federal revenues for public elementary and secondary schools from 4 to 8 percent.[8]

Titles I, II, and III of the Elementary and Secondary Education Act of 1965 (ESEA) provided allocations of federal funds to public elementary and secondary education. Title IV provided allocations for educational research and training. Fund allocations for strengthening state departments of education were provided by Title V. Originally, Title VI contained general provisions but was amended in 1966 to provide educational opportunities for handicapped children; the original Title VI became Title VII.

Title I of the Elementary and Secondary Education Act of 1965 was of major concern in this study with a focus on the legislative intent involved in its formulation and its relationship to the concept of equalization. The equalizing effect of Title I allocation during fiscal year 1969 was of concern. Title I accounted for approximately five-sixths of the total funds authorized by ESEA and was established to provide financial assistance to local educational agencies serving areas with high concentrations of children from low-income families, and to provide for the special educational needs of educationally disadvantaged children.

Enactment of ESEA

The Elementary and Secondary Act of 1965 was signed into law on April 11, 1965. Title I of the Act was formulated in recognition of the special needs of children in low-income families and the impact that the concentration of low-income families has on the ability of local educational agencies to support adequate educational programs. Financial assistance was provided under Title I to expand and improve the educational programs which contribute to meeting the special needs of educationally deprived children.

Title I was enacted originally under Public Law 89-10 in 1965 by the First Session of the Eighty-ninth Congress. Since the original enactment of Title I, it has had several amendments. The major amendments were provided by Public Law 89-313 enacted November 1, 1965, Public Law 89-750 enacted November 3, 1966 and Public Law 90-247 enacted January 2, 1968.

Research Involving Title I

Since the Elementary and Secondary Education Act of 1965 is relatively recent, there is little research available concerning Title I and equalization. However, three investigations have been conducted which are related to this study.

Anderson made a study in 1968 involving Title I. He outlined the purpose of his study as follows:

1. To investigate the effectiveness of Title I ESEA allocations to the state in providing financial assistance to public schools in low-income areas of the United States.

2. To investigate the effectiveness of Title I ESEA fund allocations to local public school agencies in providing financial assistance to poor regions.

3. To investigate recent recommendations for the allocation of federal financial aid to education and to analyze the distribution plan of Title I ESEA.

4. To suggest a revision of the Title I formula for allocation of funds to local public school agencies.[9]

The procedure employed by Anderson included four phases:

(1) reviewing related professional literature, (2) analyzing the national distribution of Title I ESEA funds, (3) formulating a suggested revised hypothetical ESEA Title I distribution plan, and (4) applying the federal-state-local hypothetical ESEA Title I model in the state of Indiana.[10]

Anderson used data for the 1965-1966 school year. His study included the fifty states in a national analysis, eight income regions in a regional analysis, and 413 Indiana school corporations in a state-local statistical analysis. The following data were collected: Title I ESEA allocations, pupils in average daily attendance, school age population, assessed valuation, current expenditures, and the state support for Indiana. The data were analyzed using Pearson product-moment coefficients of correlation.

Among Anderson's major findings and conclusions were the following:

1. There was a −.6443 correlation between income per child of school age in the states and per child of school age allocations from Title I of ESEA and a −.6387 correlation between income per child of school age of regions and ESEA allocations.

2. There was a −.1111 correlation coefficient between local school corporation ability and Title I ESEA allocations per pupil in average daily attendance.

3. In developing federal financial distribution programs, consideration must be given to political, psychological, financial, and educational implications inherent in the program.

4. Assessed valuation of property was the most important available measure of ability at the local level and provided the base for local school support and a measure of ability in most of the state support programs.

5. A hypothetical formula using the ratio of local school corporation ability and the adjusted assessed valuation per pupil in average daily attendance of the local school corporation, would tend to equalize the burden of meeting the needs of the educationally deprived children along the lines of a foundation program.[11]

Based on his findings and conclusions, Anderson recommended the distribution of Title I ESEA funds at the local level in a manner which would reflect an inverse relationship between Title I ESEA money and the adjusted valuation of property in the local school district.[12]

In a 1967 study conducted by Baley, a general picture of projects conducted under Title I ESEA in the public school districts of Iowa during 1965 was provided. The data used in Baley's study were obtained from official Title I ESEA documents and applications on file with the Iowa State Department of Public Instruction. Baley's study was not directly concerned with equalization; however, some of his findings have implications for a study of the equalization effect of Title I ESEA. Among those findings which were most directly related to the present investigation are:

1. There was a positive relationship between school district size and the percentage of school districts submitting approvable Title I projects.

2. The bulk of Title I funds were allocated to the smaller school districts in the state.

3. Operating non-high school districts were low in participation from the standpoint of number of approved applications and the percentage of allocated funds approved for projects.

4. A small portion of funds was approved for preschool projects.

5. There was an inverse relationship between the size of the school district and the percentage of eligible students participating in the projects.[13]

Under a grant from the Economic Development Administration, Barkin and Hettich conducted an interstate distributional analysis of Title I of the Elementary and Secondary Education Act of 1965. The study was justified as follows:

> The formula governing this redistribution deserves analysis simply because of the quantitative importance of the program. However, the formula may well have significance beyond the particular program in which it is now embodied. Given the widespread support which the ESEA has received, it seems likely that federal aid to education will expand further in the future. Because it is an acceptable political compromise, the ESEA's formula may be used as a model by politicians fashioning new federal grant programs to aid education in the years to come.[14]

Barkin and Hettich analyzed the distribution of Title I funds using two different criteria, horizontal equity and vertical equity. A program was described as being horizontally equitable when people who have the same resources and financial position are treated in the same manner. Vertical equity referred to the way in which people with different resources and financial position are treated.

They found that the official need index, the method of measuring the number of children from poverty families, provided a satisfactory measure of the disadvantaged school population. It was noted, however, that the recent changes in aid to dependent children legislation may impair the future usefulness of the official measure of need. This was the horizontal aspect of the study. The vertical analysis, consideration of net transfers and gross aid, led to the conclusion that the degree of redistribution of wealth among states under Title I was very small.[15]

During the period of the study by Barkin and Hettich, the Title I ESEA allocation formula consisted of the number of eligible children under the provisions of the legislation times half the state average per-pupil expenditure. They interpreted the use of the state average per-pupil expenditure as a weighting procedure in the formula. In analyzing the Title I ESEA allocation formula Barkin and Hettich concluded:

> It is . . . clear that the weighting procedure now in use serves to further limit the redistributive impact of a program which might otherwise be considered as merely neutral. Thus, the first major act to aid education is a conservative measure when judging by distributional standards. While the fact that such an act was passed by Congress may constitute a new departure, the program itself breaks little new ground in equalizing the states' ability to provide education. If future federal aid legislation is to make a marked contribution to this, consideration should be given to introducing fiscal capacity as a criterion for distributing federal funds.[16]

QUESTIONS INVESTIGATED IN THIS STUDY[17]

The purpose of this study was: (1) to examine the legislative intent in the formulation of Title I of the Elementary and Secondary Education Act of 1965; and (2) to analyze the effect of Title I in the equalization of funds for public elementary and secondary education among counties within nine selected states. The following questions were investigated:

1. What was the legislative intent in the formulation of Title I of the Elementary and Secondary Education Act of 1965?

2. What was the relationship between Title I allocations per

child in enrollment and adjusted assessed valuation of property per school age child among counties within each of the nine selected states?

3. What was the relationship between Title I allocations per school age child and adjusted assessed valuation of property per school age child among counties within each of the nine selected states?

4. What was the relationship between Title I allocations per child in enrollment and effective buying income per school age child among counties within each of the nine selected states?

5. What was the relationship between Title I allocations per school age child and effective buying income per school age child among counties within each of the nine selected states?

6. Was there a significant difference between the relationships revealed when using Title I allocations per child in enrollment as a variable and the relationships revealed when using Title I allocations per school age child as a variable among counties within each of the nine selected states?

7. Was there a significant difference between the relationships revealed when using adjusted assessed valuation of property per school age child as a variable, and the relationships revealed when using effective buying income per school age child as a variable among counties within each of the nine selected states?

Data Source and Treatment

The data for the first portion of the problem, the legislative intent in the formulation of Title I of the Elementary and Secondary Education Act of 1965, were secured from subcommittee hearing reports and committee reports of the Senate Labor and Public Welfare Committee and the House of Representatives Education and Labor Committee pertaining to the legislation. In dealing with this portion of the problem, the data were not treated statistically. The procedure utilized involved an extensive review of testimony and a report in narrative form. The first question was concerned with the first portion of the problem.

In dealing with the second portion of the problem, questions 2 through 7 were investigated. This portion of the problem involved a within-state analysis of the equalization effect of Title I of the Elementary and Secondary Education Act of 1965. The nine states selected were Colorado, Florida, Massachusetts, Missouri, Ohio, Pennsylvania, Tennessee, Texas and Washington.

They were selected because they represented a cross-section of the country geographically and demographically and differing patterns of urban, suburban and rural conditions.

Data were compiled for all of the counties within each of the nine selected states. More specifically, for each county the following data were collected:

1. Title I allocations for fiscal year 1969.
2. Enrollments for fiscal year 1969.
3. Adjusted assessed valuation of property for 1966.
4. An estimation of effective buying income for 1968.
5. An estimation of the school age population for 1968.

Title I allocations for fiscal year 1969 were obtained from the United States Office of Education. Adjusted assessed valuation of local property for counties, based upon official assessments made during 1966, was obtained from the *1967 Census of Governments-Taxable Property Values.*[18] Effective buying income for counties was acquired from the 1969 Survey of Buying Power published in *Sales Management.*[19] An estimation of school age population in each county of the nine selected states was determined by projecting the number of children age five through seventeen as determined by the 1960 decennial census to 1968. The projection was based on the total population change from 1960 to 1966 for each county as reported by the United States Bureau of Census in *Current Population Reports.*[20] The annual rate of change from 1960 to 1966 for the total population in each county was applied to the school age population in each county of the nine selected states in order to extrapolate an estimation of school age population for 1968.

The data were used to derive four variables for each of the counties in the nine selected states: (1) Title I allocations per child in enrollment, (2) Title I allocations per school age child, (3) adjusted assessed valuation of property per school age child, and (4) effective buying income per school age child.

Pearson product-moment correlation coefficients were computed in the investigation of questions 2, 3, 4, and 5. A perfect inverse relationship, a correlation of −1.00, was representative of absolute equalization. A neutral relationship, as expressed by the correlation coefficient of 0.00, implied that the revenue from Title I ESEA had no effect upon equalization. A Pearson product-moment correlation coefficient of +1.00 was defined as absolute disequalization; in this instance, those areas with the greatest ability to finance education would have had the greatest Title I allocations. In the investigation of questions 6 and 7 Z-statistics were computed. In computing Z-statistics it was necessary to subject the distributions to Fisher's Z transformation to produce approximately normally distributed statistics. All tests were made at the .05 level of significance.

MAJOR FINDINGS OF THE STUDY

The Legislative intent of Title I and its effect on equalization are presented in this section.

The Elementary and Secondary Education Act of 1965, in which Title I was the major program, was formulated as a means of confronting many of the economic and social problems of the nation. Ignorance was seen as impeding the social and economic growth of the nation. Much of the testimony presented related ignorance to poverty, thus ESEA, in general, and Title I specifically, were formulated with the intent of providing federal financial assistance for the education of children from low-income families.

In the original legislation, children from families with an annual income of less than $2,000 were defined as being unquestionably poor, thus educationally deprived. The intent of Title I was to focus upon educational programs for children with the greatest needs. The amendments to the original Title I proposals, which provided for the inclusion of additional categories of eligible children and the changing of the low-income factor from $2,000 to $3,000 annual income, were formulated with the intent of expanding the program to additional children recognized as being educationally disadvantaged.

The legislation under Title I provided for programs and projects to be administered flexibly. The intention in this provision was to provide state and local educational agencies with the opportunity to design programs and projects appropriate to local needs of educationally disadvantaged children.

A financial aid program designed around the concept of equalization, as defined in this study, would distribute funds on the basis of local resources available to finance an educational program. The program would provide the greatest relative amount of aid to those areas with the smallest relative ability to finance an educational program.

In the original Title I formula for distributing funds, the per-pupil expenditure rate was based on half the state's average per-pupil expenditure. This provision was formulated with the intent of making allowances for differences in the cost of living and cost of education in different states. The use of the state's per-pupil expenditure rate in the formula had the potential of producing a financial disequalization effect among states. The amendment to the Title I formula which changed the per-pupil expenditure rate to half the national average per-pupil expenditure if greater than the state average was formulated with the intention of providing more funds for the less wealthy states. This amendment would tend to lessen the potential disequalization effect of the Title I formula in the allocation of funds among states; however, the funds to the less wealthy states were still based on a lower rate than for the more wealthy states.

Thus, it appears logical to conclude that the Title I formula for distributing funds to local educational agencies could produce an effect of equalization within states based upon the population it was designed to serve. It also could have an effect of disequalization among states in that the less wealthy states were allocated Title I funds using a lower per-pupil expenditure rate than the more wealthy states.

Findings Relative to the Equalization Effects of Title I

Following is a summary of the equalization effects of Title I.

Relationship Between Title I Allocations per Child in Enrollment and Adjusted Assessed Valuation per School Age Child. The analyses of the equalization effect of Title I within states included the investigation of the relationship between Title I allocations per child in enrollment and adjusted assessed valuation of property per school age child. This investigation revealed that there was a significant inverse relationship between Title I allocations per child in enrollment and adjusted assessed valuation of property per school age child among the counties within four of the nine selected states. In the remaining five states there was no significant relationship between these two variables among counties. Based upon the investigation of this relationship it was found that Title I had an equalizing effect among counties within Colorado, Florida, Ohio, and Tennessee, and a neutral effect, in terms of equalization, among counties within Massachusetts, Missouri, Pennsylvania, Texas, and Washington. (See Table 10-1).

TABLE 10-1
CORRELATIONS BETWEEN TITLE I ALLOCATION PER CHILD IN ENROLLMENT AND ADJUSTED ASSESSED VALUATION OF PROPERTY PER SCHOOL AGE CHILD

State	*Correlation Coefficient*
Colorado	−.3064*
Florida	−.4446*
Massachusetts	−.0542
Missouri	−.1662
Ohio	−.5998*
Pennsylvania	−.1426
Tennessee	−.2850*
Texas	−.0813
Washington	−.2553

*Significant at the .05 level.

Relationship Between Title I Allocations Per School Age Child and Adjusted Assessed Valuation Per School Age Child. The equalization effect of Title I was analyzed relative to the relationship between Title I allocations per school age child and adjusted assessed valuation of property per school age child. The analysis indicated that there was a significant inverse relationship between Title I allocations per school age child and adjusted assessed valuation of property per school age child among counties within five of the nine selected states. There was no significant relationship between these two variables among the counties within four of the nine selected states. Based upon the investigation of this question, it was found that Title I had an equalizing effect among counties within Florida, Ohio, Pennsylvania, Tennessee, and Texas, and no equalizing or disequalizing effect among counties within Colorado, Massachusetts, Missouri and Washington. (See Table 10-2).

Relationship Between Title I Allocations Per Child in Enrollment and Effective Buying Income Per School Age Child. In investigating the equalization effect of Title I, the relationship between Title I allocations per child in enrollment and effective buying income per school age child was analyzed. This was the third portion of the within-state analysis. Among the counties of eight of the nine selected states, a significant inverse relationship between Title I allocations per child in enrollment and ef-

Table 10-2

Correlations Between Title I Allocations Per School Age Child and Adjusted Assessed Valuation of Property Per School Age Child

State	*Correlation Coefficient*
Colorado	−.2480
Florida	−.5031*
Massachusetts	+.1211
Missouri	−.0409
Ohio	−.5686*
Pennsylvania	−.2545*
Tennessee	−.4816*
Texas	−1674*
Washington	−.2531

*Significant at the .05 level.

fective buying income per school age child was revealed by the investigation. Based upon the investigation of this question, it was found that Title I had an equalizing effect among counties within Colorado, Florida, Missouri, Ohio, Pennsylvania, Tennessee, Texas, and Washington. Title I had no significant equalizing or disequalizing effect among counties within Massachusetts. (See Table 10-3).

Table 10-3

Correlations Between Title I Allocations Per Child in Enrollment and Effective Buying Income Per School Age Child

State	*Correlation Coefficient*
Colorado	−.4233*
Florida	−.6141*
Massachusetts	+.0714
Missouri	−.6117*
Ohio	−.3948*
Pennsylvania	−.3948*
Tennessee	−.4636*
Texas	−.5520*
Washington	−.5351*

*Significant at the .05 level.

Relationship Between Title I Allocations Per School Age Child and Effective Buying Income Per School Age Child. The next portion of the within-state analysis revealed a significant inverse relationship between Title I allocations per school age child and effective buying income per school age child among counties within eight of the nine selected states. Based upon the investigation of this question it was found that Title I had an equalizing effect among counties within Colorado, Florida, Missouri, Ohio, Pennsylvania, Tennessee, Texas, and Washington. In Massachusetts, Title I had no significant equalizing or disequalizing effect. (See Table 10-4).

TABLE 10-4

CORRELATIONS BETWEEN TITLE I ALLOCATIONS PER SCHOOL AGE CHILD AND EFFECTIVE BUYING INCOME PER SCHOOL AGE CHILD

State	*Correlation Coefficient*
Colorado	−.4316*
Florida	−.6746*
Massachusetts	+.0248
Missouri	−.6123*
Ohio	−.6209*
Pennsylvania	−.4989*
Tennessee	−.7122*
Texas	−.5802*
Washington	−.4437*

*Significant at the .05 level.

Different Title I Variables. The analyses of the equalization effect of Title I involved a comparison of the correlations derived from the two different Title I allocation variables. It was found that the relationships utilizing Title I allocations per child in enrollment as a variable did not differ significantly from relationships utilizing Title I allocations per school age child as a variable among counties within the nine selected states.

Different Measures of Ability to Finance Education. The statistical comparisons of the correlation coefficients revealed by the two different measures of ability to finance education revealed that the relationships utilizing adjusted assessed valuation of property per school age child were not significantly different than the relationships utilizing effective buying income per school age child as a measure of ability among the counties within Colorado, Florida, Massachusetts, Ohio, Pennsylvania, Tennessee, and Washington. There was a significant difference in the relationship revealed by the two measures of ability, adjusted assessed valuation of property per school age child and effective buying income per school age child, among counties within Missouri and Texas.

SUMMARY AND CONCLUSIONS

Title I of the Elementary and Secondary Education Act of 1965 was formulated to provide federal financial assistance for programs designed specifically to meet the needs of educationally disadvantaged children. The major portion of the funds under Title I was apportioned to local educational agencies with concentrations of educationally disadvantaged children. Under the original legislation, children from families with less than $2,000 annual income and children from families exceeding $2,000 annual income in the form of aid to families with dependent children were described as being educationally disadvantaged. Amendments to the original legislation provided that Title I funding would be allocated to local educational agencies to serve the special needs of children living in institutions operated and supported by local educational agencies for neglected or delinquent children and children living in foster homes with public support.

Title I was amended to provide programs for handicapped, delinquent, and neglected children living in institutions operated by state educational agencies. Amendments to Title I also provided allocations to state educational agencies to establish and improve educational programs for children of migratory agricultural workers.

Based upon the findings related to the legislative intent in the formulation of Title I, it appears logical to conclude that Title I was designed as a categorical aid program intended to benefit a target population—educationally disadvantaged children. Title I was not formulated primarily as a means of equalizing funds for public elementary and secondary education. However, in analyzing the Title I formula, it appears that the formula could have the potential to equalize funds among local educational agencies within a state. In the original enactment, the Title I formula was designed to allocate funds to each state on the basis of the average per pupil expenditure in that state. Thus, the Title I formula was designed to allocate less per eligible child to states which had lower average per pupil expenditures, or potentially less wealthy states. The formula was amended to allocate Title I funds on the basis of the national average per pupil expenditure if greater than the average per pupil expenditure of a state. This amendment would appear to lessen the potential disequalizing effect of Title I among states.

Based upon the findings relative to the portion of this study dealing with the equalizing effect of Title I among counties within nine selected states, the following conclusions appear justified:

1. Title I allocations did not have a disequalizing effect upon resources available for public elementary and secondary education among the counties within the nine selected states. No disequalizing relationships were found within any of the nine selected states. All relationships were either neutral or inverse.

2. Title I allocations had a tendency to equalize resources for public elementary and secondary education among the counties within most of the nine selected states. This generalization is based upon the following findings: (1) eight of the nine selected states had significant inverse relationships between both of the Title I allocation variables and effective buying income per school age child, (2) five of the nine selected states had significant inverse relationships between Title I allocations per school age child and adjusted assessed valuation per school age child, and (3) four of the nine states had significant inverse relationships between Title I allocations per child in enrollment and adjusted assessed valuation per school age child.

3. Title I had more of a tendency to display an equalizing effect within the nine selected states when using effective buying income per school age child than when using adjusted assessed valuation of property per school age child as a measure of ability to finance public elementary and secondary education. This conclusion is based on these findings: (1) eight of the nine states had significant inverse relationships between both Title I allocation variables and effective buying income per school age child, (2) three of the nine states had significant inverse relationships between both Title I allocation variables and adjusted assessed valuation per school age child, and (3) three of the nine states had significant inverse relationships between one of the Title I allocation variables and adjusted assessed valuation per school age child.

4. The two Title I variables, Title I allocation per child in enrollment and Title I allocations per school age child, did not reveal different findings in analyzing the equalizing effect among counties within nine selected states. This conclusion is based on the following findings: (1) eight of the nine states had significant inverse relationships between effective buying income

per school age child and both Title I allocation variables, (2) five of the nine states had significant inverse relationships between Title I allocations per school age child and adjusted assessed valuation of property per school age child, and (3) four of the nine states had significant inverse relationships between Title I allocations per child in enrollment and adjusted assessed valuation per school age child.

The within-state analyses of the equalization effect of Title I revealed that Title I did have a tendency to equalize resources for public elementary and secondary education among counties within states. Thus, it appears that the Title I formula had a tendency to identify counties with relatively lower ability to finance education and to direct funds in a way which tended to produce an equalizing effect.

One of the major purposes of state aid programs is to equalize the financial resources for elementary and secondary pupils. Therefore, it is desirable that federal programs such as Title I of ESEA be designed so as not to disequalize educational opportunity.

FOOTNOTES

1. National Education Association, Research Division, The Educational Policies Commission, *Educational Responsibility of the Federal Government,* Washington, D. C.: National Education Association, 1964, p. 1.

2. Roe L. Johns and Edgar L. Morphet, *Financing the Public Schools.* Englewood Cliffs, N. J.: Prentice Hall, Inc., 1960. p. 384, quoting Hutchings, Munse, and Booker, Federal Funds for Education, 1959, pp. 5-6.

3. *Ibid.*

4. Advisory Commission on Intergovernmental Relations, *The Role of Equalization in Federal Grants.* Washington, D. C.: Government Printing Office, 1964. p. 48.

5. Johns and Morphet, p. 143.

6. U. S. Congress, Senate, Committee on Labor and Public Welfare, Elementary and Secondary Education Act of 1965: *Background Material with Related Presidential Recommendations,* S. Doc. 45, 89th Cong., 1st sess., 1965, pp. 14-15.

7. Edgar L. Morphet, Roe L. Johns, and Theodore L. Reller, *Educational Organization and Administration Concepts, Practices and Issues.* Englewood Cliffs, N. J.: Prentice Hall, Inc., 1967. p. 226.

8. *Ibid.*

9. Myron L. Anderson, "A Financial Analysis of Title I, Public Law 89-10, and the Formation of a Defensible Federal Financial Aid Distribution Plan," *Interdependence in School Finance: The City-The State-The Nation.* Washington, D. C.: National Education Association, 1968. p. 192.

10. *Ibid.*

11. *Ibid.*, pp. 194-195.

12. *Ibid.*, p. 195.

13. William Myron Baley, "An Analysis in Iowa of Selected Aspects of Projects Under Provisions of Title I, Public Law 89-10, for Fiscal 1966," *Dissertation Abstracts*, Vol. XXVIII, No. 8, (1968), p. 2878-A.

14. David Barkin and Walter Hettich, *The Elementary and Secondary Education Act: A Distributional Analysis.* St. Louis, Mo.: Washington University Institute for Urban and Regional Studies, 1968. p. 1.

15. *Ibid.*, pp. 29-30.

16. *Ibid.*, p. 30.

17. The remainder of this chapter is abstracted from John Fredrick Wagner, *Title I. ESEA: Legislative Intent; Equalization Effect Within Nine States.* Doctoral dissertation. Gainesville, Fla.: University of Florida, 1970. This study was sponsored by the National Educational Finance Project.

18. U. S. Department of Commerce, Bureau of Census, Census of Governments, 1967, Vol. 2, *Taxable Property Values* (Washington, D. C.: Government Printing Office, 1968).

19. "County-City Population, Income, Retail Sales Data," *Sales Management*, CII (June 10, 1969), D1-D195.

20. U. S. Department of Commerce, Bureau of Census, *Current Population Reports,* Series P-25, No. 427, "Estimates of the Population of Counties and Metropolitan Areas, July 1, 1966: A Summary Report". Washington, D. C.: Government Printing Office, 1969.